

1988
AMENDMENTS
to the
Program of Studies for Junior High Schools

To facilitate present and future amendments to the Junior High Program of Studies, the subjects have been arranged alphabetically for the Core and Complementary courses. New dividers are included with these amendments and should be inserted, together with the content pertinent to each section, in the following order.

1. Replace Contents page.

CORE COURSES

1. Health and Personal Life Skills: Insert new divider and discard the old, "Health/Phys. Ed./Guidance". Replace page Health A.1-A.2, and move sections A. B. C. and D. to the place immediately following the new divider.
 - a) Guidance was incorporated with Health and Personal Life Skills effective September 1987: remove and discard all Guidance sections.
 - b) Physical Education is now a separate subject (see No. 4 below).
2. Language Arts: Insert new divider and discard the old. There are no content changes to the Language Arts program.
3. Mathematics: Insert new divider and discard the old, "Computer Literacy/Mathematics/Science". All of Mathematics sections A. B. C. and D. are replaced and the new sections should be inserted immediately following the new divider.
 - a) Computer Literacy is moved to the Practical Arts portion of the Complementary Courses (see No. 3.a Complementary Courses).
 - b) Science is now a separate subject (see No. 5 below).
4. Physical Education: Insert new divider. All of Physical Education sections A. B. C. and D. are replaced and the new sections should be inserted immediately following the new divider.
5. Science: Insert new divider. There are no content changes to the Science program at present.
6. Social Studies: Insert new divider and discard the old. There are no content changes to the Social Studies program at present.

LB
1629.5
A3
A35
1984
gr. 7-9
amend.
1988

ALTA
373.19
1984
Gr. 7-9
amend.
1988

CURRGDHT

CURR. HIST

COMPLEMENTARY COURSES

1. Discard the Options divider, and the Group A Options contents page.
2. Insert new divider, Fine and Performing Arts (Art, Drama, Music).
 - a) Art: Replace page Art A.1. There are no content changes to the Art program.
 - b) Drama: Replace page Drama A.1. There are no content changes to the Drama program at present.
 - c) Music: Replace Music sections A. B. C. and D.
3. Insert new divider, Practical Arts (Computer Literacy, Home Economics, Industrial Education, Typewriting).
 - a) Computer Literacy: Replace page Computer Literacy A.1. There are no content changes to the Computer Literacy program at present.
 - b) Home Economics: Replace Home Economics sections A. B. C. and D.
 - c) Industrial Education: Replace page Industrial Education A.1. There are no content changes to the Industrial Education program at present.
 - d) Typewriting: Replace page Typewriting A.1. There are no content changes to the Typewriting program at present.
4. Second Languages (French, German, Ukrainian): Insert new divider and discard the old. All Second Languages sections should be inserted immediately following the divider. There are no content changes to the Second Languages programs.

Program OF Studies

CONTENTS

Introduction	(iii)
The Goals of Basic Education for Alberta	(v)
Developing Desirable Personal Characteristics	(vi)
Communication and Critical Thinking Skills	(vii)

CORE COURSES

HEALTH AND PERSONAL LIFE SKILLS
LANGUAGE ARTS
MATHEMATICS
PHYSICAL EDUCATION
SCIENCE
SOCIAL STUDIES

COMPLEMENTARY COURSES

FINE AND PERFORMING ARTS

Art
Drama
Music (Choral, General, Instrumental)

PRACTICAL ARTS

Computer Literacy
Home Economics
Industrial Education
Typewriting

SECOND LANGUAGES

French
German
Ukrainian

HEALTH AND PERSONAL LIFE SKILLS

A. PROGRAM RATIONALE AND PHILOSOPHY

Each person begins life with unique characteristics, capabilities and limitations, and the potential to grow as a creatively productive person. Increasingly, however, the social environment becomes the major influence on a person's development: intellectual, social/personal, ethical/moral and physical.

As a contributor to the environment of adolescents, the school has a responsibility to assist young adults to see themselves, and others, as unique and important individuals. A health program which encompasses the multi-dimensional nature of the person, assists students to recognize their potential and to become aware of the alternatives that will enhance their personal lifestyles.

The rationale for Health and Personal Life Skills as a subject taught in Alberta schools is based on *The Goals of Basic Education for Alberta* as adopted by the Alberta Legislative Assembly in 1978 and the Guiding Principles for Secondary Education in Alberta as found in the *Secondary Education in Alberta* policy statement, issued in June 1985.

The Goals of Basic Education for Alberta states:

"Schooling, as part of education, accepts primary and distinctive responsibility for specific goals basic to the broader goals of education. Programs and activities shall be planned, taught and evaluated on the basis of these specific goals."

Two of the "Goals of Schooling" provide the basis for the Health and Personal Life Skills program:

- "Acquire knowledge and develop skills, attitudes and habits which contribute to physical, mental and social well-being."
- "Acquire knowledge and develop skills, attitudes and habits required to respond to the opportunities and expectations of the world of work."

The guiding principles for secondary education in Alberta are consistent with the following statement:

"The aim of education is to develop the knowledge, the skills and the positive attitudes of individuals, so that they will be self-confident, capable and committed to setting goals, making informed choices and acting in ways that will improve their own lives and the life of their community."

"Achieving the aim of education is not the sole responsibility of schools. The responsibility for educating young people is widely shared within the community."

The Health and Personal Life Skills program encourages the involvement of community agencies. To promote accurate information exchange and to encourage ongoing health education, it is important to involve parents and community resource persons in the health program. Health education is a responsibility shared with the home and community.

As principle #1 of the *Secondary Education in Alberta* policy statement says, "The secondary school, in cooperation with other agencies in society, must assist each student to become a competent, confident and responsible individual."

The curriculum is organized to "...accommodate the developmental needs of students while preparing them to live in a highly complex and changing society."

This is consistent with principle #3 of the *Secondary Education in Alberta* policy statement: "Secondary schools must prepare students for responsible citizenship in a society which is changing constantly."

Through remediation and enrichment suggestions and with adherence to tolerance and understanding guidelines, the Health and Personal Life Skills curriculum recognizes and attempts to "meet the wide range of needs and abilities of students".



MATHEMATICS

A. PROGRAM RATIONALE AND PHILOSOPHY

Mathematics is an important component of education because it enables citizens to lead useful and productive lives and to be adaptive in an ever-changing technological society. The study of mathematics leads to a better understanding and appreciation of the quantitative and geometric nature of the concrete world and to the development of the knowledge, skills and positive attitudes necessary for decision making in personal living. All students should receive a level of mathematics education appropriate to their needs and abilities.

A mathematics program must provide a balance between a knowledge base and the application of that knowledge, especially in new situations and with new technologies. The pervasiveness of calculators and microcomputers and the increasing reliance of the economy on information transfer and processing have changed the ways in which mathematics is used in our society. The result is a substantial (and ongoing) change in emphasis within the familiar mathematical topics such as computational facility, problem solving, measurement and geometry.

The development of positive attitudes toward mathematics and learning is an essential element of a mathematics program in that it nurtures the confidence necessary for taking risks, accepting challenges and making decisions. Positive attitudes are generated by making mathematics meaningful and relevant to students, by selecting activities that are appropriate to students' abilities and by providing opportunities for students to experience success.

Each student must be viewed holistically and as capable of learning. Since self-concept influences learning and achievement, the program should encourage in each student a positive self-concept, and should focus on the growth of each individual. Appropriate and varying organizational and instructional strategies should be implemented to meet the diverse and individual needs of students.

Although junior high school students are at various stages of physical, emotional, and cognitive development, they all require experiences at a concrete level. Extensive experiences with concrete representations of mathematical concepts lead to intuitive understandings of abstractions. Students should be carefully guided from the concrete (model), through the transitional (pictorial representation) and eventually on to the formal (symbolic) level of cognition as mathematics concepts are being developed.

Junior high school students are in a transitional stage of life. Adolescence, characterized by rapid physical growth and the onset of puberty, is a period of uncertainty and great concern about peer relationships. The physical, intellectual, emotional, and social development of the students vary greatly. Supportive comments and guidance, and a genuine expression of concern for students, can help to maintain meaningful communication with students and enhance their learning.

The aim of the Junior High Mathematics Program is to develop an understanding of mathematics concepts by making mathematics relevant and concrete. The emphasis within the

program must reflect the reality of the technological age. Appropriate experiences presented in a logical sequence will result in positive attitudes and positive learning outcomes.

B. GOALS AND OBJECTIVES

The goals of the Junior High Mathematics Program are to enable students to:

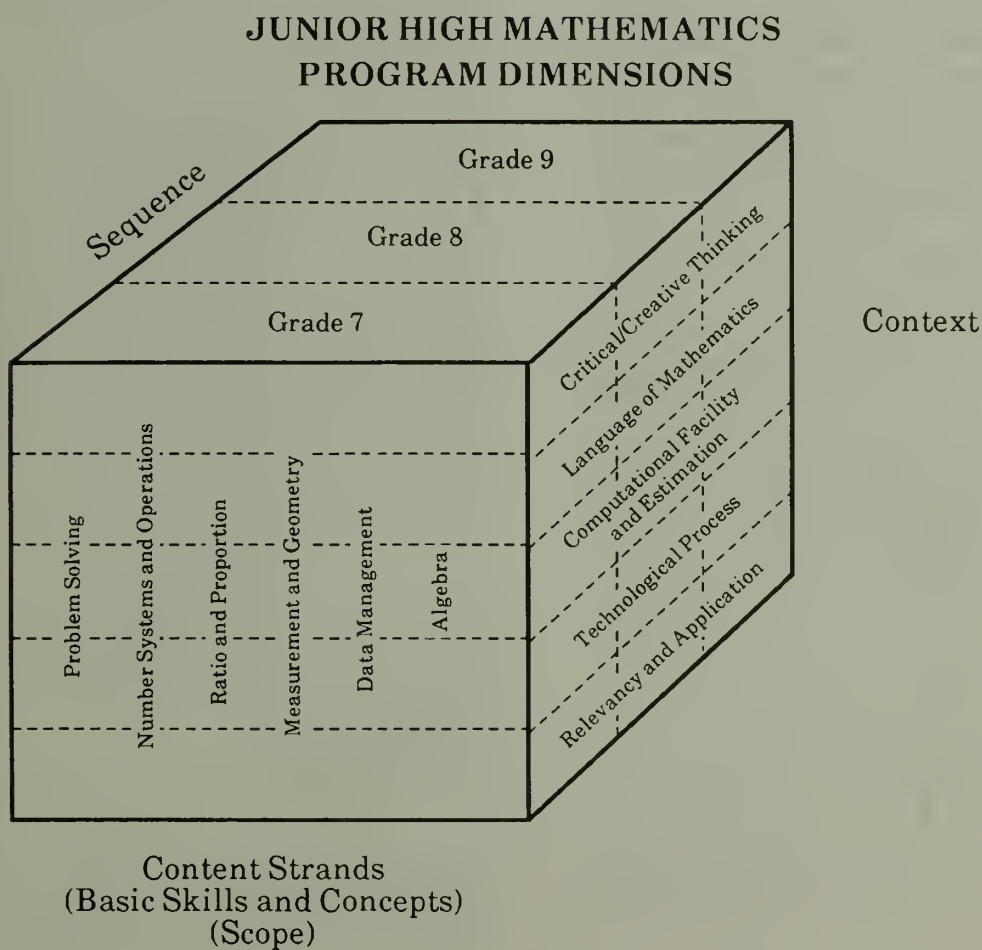
- solve problems and to grow in their capability to deal with new or different situations
- use mathematics as a tool in the pursuit of personal goals and aspirations
- develop a positive self-concept and a positive attitude toward mathematics and lifelong learning.

C. CONTENT

STRUCTURE OF THE PROGRAM

The content of the Junior High Mathematics Program is divided into six strands: problem solving; number systems and operations; ratio and proportion; measurement and geometry; data management; and algebra. The content is a consolidation of the skills and concepts developed in the elementary program and forms the basis for the further study of mathematics at the senior high school level. The skills and concepts within these strands are carefully sequenced over three grades taking into account the developmental nature of mathematics and the developmental nature of the learner. All students enrolled in this program should have an opportunity to complete it successfully.

There is an implicit dimension of the mathematics program that transcends the scope and sequence. It cannot be discretely taught as a unit of study nor can it be found in a chapter of a textbook. The context of the program is the element of teaching that creates and fosters positive attitudes, builds appropriate mindsets, and helps the learner interpret and understand the environment in relation to mathematics. Critical and creative thinking, the acquisition of quantitative concepts and skills (number sense), knowledge about and willingness to use technology, knowledge of the language and history of mathematics and the meaningfulness and relevancy of mathematics, must be modelled on a continuous basis and must be integrated into all strands of the program.



The teacher can model and integrate these aspects of the mathematics program through his or her mediation or explanation to students. Understandings are learned, modified and refined over time, eventually building conceptions similar to what the teacher has in mind. The teacher observes students at a task and actively refines their understanding until the desired learning outcome is obtained. Teachers help students interpret these tasks by what they say about them (or by what they leave unsaid). For example, teachers who talk about the perplexing nature of problem solving are likely to impart to students the understanding that perplexity is a normal state in solving problems.

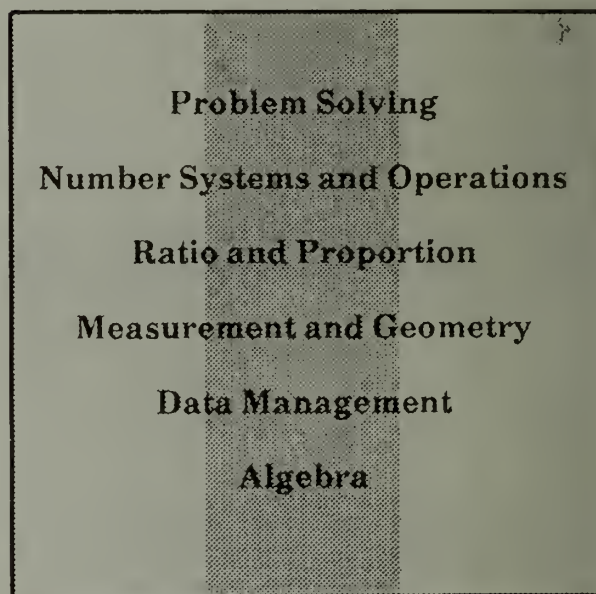
Student understandings and learning outcomes may not always be what teachers intend. For example, when students are always given busy work on computation, the understanding that they may develop is that "getting done" is more important than learning to compute. Students construct understandings about what is important, what to pay attention to and how to behave, from their own experiences and from tasks they encounter within the school experience. New experiences and tasks are combined with old understandings to build new understandings and conceptions.

REQUIRED-ELECTIVE FORMAT

The Junior High Mathematics Program has two components. The required component of the course outlined by the scope of the program describes the basic skills, knowledge and attitudes that all students should be expected to acquire. Of the 100-hour minimum requirement for the program, 80% (or 80 hours) shall be spent on this element of the course.

The elective component of the program shall be used to adapt and enhance the required portion of the course to meet the diverse and individual needs and capabilities of individual students. The activities associated with the elective must be integrated throughout the required component and shall be used to remediate and enrich student learning and/or to innovate and experiment with varying instructional and organizational strategies that may enhance student learning. The elective component is not intended to provide acceleration or advanced placement and therefore avoids unnecessary overlap with other courses or courses at a higher level. The maximum time allotment for the elective component shall be 20% of the instructional time.

In cases where the time allotted to the Junior High Mathematics Program exceeds the 100-hour minimum requirement, additional content may be presented to all the students. This content should extend and enhance the understanding of the knowledge, skills and attitudes in the required portion of the program



REQUIRED

80 h (80%)

ELECTIVE

20 h (20%)

Enrichment
 Remediation
 Innovation, Experimentation
 Individual Needs

SCOPE OF THE PROGRAM

Problem Solving

The most important goal of mathematics instruction is the development of students' ability to solve problems. The emphasis on problem solving requires a change in focus from exclusively finding answers to routine word problems to the acquisition and application of many different skills and strategies. Students should be able to apply these strategies to a variety of problem situations where the solutions are unknown and the means to the solution are not immediately evident.

Although problem solving is a legitimate goal in its own right, it should not be viewed as an isolated activity but, rather, as a group of related skills that are a part of a mathematics program. Because of the emphasis it must receive, problem solving appears both as a strand in the program and in an integrated form. The stages of problem solving and a variety of specific skills and strategies are identified and then developed within the strand. The skills, strategies and attitudes associated with problem solving are integrated into the rest of the program and should become part of the teaching philosophy.

Number Systems and Operations

Quantitative thinking and understanding and computational facility are still important goals of mathematics instruction. However, there must be a recognition that there are several ways to compute and today's students must be adept in all the methods. Students must be able to decide which method is most appropriate to the situation at hand and what degree of precision and accuracy is required.

Mental computation, paper-and-pencil operations, estimation and the use of calculators and/or microcomputers are computational strategies that must replace the singular emphasis on paper-and-pencil facility. Paper-and-pencil drills on arithmetic operations with more than three-digit numbers must be de-emphasized. Facility with one-digit number facts must be maintained. Activities that develop number sense and demonstrate the utility of mathematics in problem-solving situations shall increase in emphasis.

Working with numbers and number operations in a real world, problem-solving context gives meaning to numbers and to the operations with them. This is especially true of fractions and decimals. Emphasis shall be placed on the understanding of fractions and decimals as numbers, and on the comparisons of and conversions between fractions and decimals. Drill on operations of fractions with large denominators or multi-place decimals should be de-emphasized.

Mental computation involves finding natural and easy (not formal and algorithmic) strategies for calculations and results in an understanding of number relationships that cannot be replaced by technology. An understanding of the basic properties of number operations shall be developed for the purpose of doing mental calculations.

A heavy emphasis shall be placed on estimating measures and computations (including those that appear in complicated forms). Estimation requires a feel for numbers that goes beyond formal round-off procedures. Students must develop an estimation mindset that includes knowing what an estimate is, accepting its legitimacy, sensing when it is appropriate to estimate, recognizing how precise an estimate should be for a given situation and when a computed answer is sensible.

Ratio and Proportion

Ratio and proportion concepts, although they are an extension of the number systems and operations strand, have been collectively identified as a strand for the purpose of emphasis. The importance and use of equivalent representations in areas such as comparative shopping, scale drawings, model building, map reading, calculating wages, understanding and computing percents, and problem solving, as well as in the study of pure mathematics, cannot be over emphasized. A basic understanding of ratio and proportion must be developed at a concrete level. The applications of ratio and proportion, and percent are numerous and should be made meaningful and relevant to students.

Measurement and Geometry

SI metric measurement concepts and skills need to be consolidated in junior high school. Concrete experiences with making direct comparisons of objects with arbitrary units (e.g., the hand) and with standard units of length, area, volume, capacity and mass (e.g., cm, km², m³, L, g) shall be provided. The need for large and small units of measure and the need to subdivide units into fractional parts should be emphasized. Formulas must be treated as useful tools for finding indirect measurements (e.g., speed) and for finding measurements indirectly (e.g., area). They shall be used after students understand the measure they are to calculate. Excessive memorization of formulas is discouraged.

Geometry is the study of the attributes and properties of various shapes and objects. Attributes to be considered are size and shape of one-, two-, and three-dimensional objects and the transformations of one- and two-dimensional shapes. The measurement of geometric attributes is best done in the context of measurement.

Data Management

People are confronted daily with data from which they must make personal and career decisions. Students must cope effectively with the vast amounts of data that they encounter. The importance of statistics, techniques for collecting and interpreting data, making predictions from data, and techniques for organizing and displaying data will constitute this strand.

Algebra

Algebra and algebraic thinking are not restricted to courses in the high school. From the time students enter school, they learn about generalizations in the form of symbolism,

relations and functions. Open sentences ($\square + 2 = 8$) are used to express basic addition facts; ordered pairs are learned as a part of language development (associating a name with an object); relationships among numbers are learned through counting (less than, equal to, or greater than); and functions which have a unique ordered pair, given the first number, are used in learning basic number facts (e.g., in learning the three-times multiplication table, the set of answers 3, 6, 9... are a function of the counting numbers 1, 2, 3...). Graphs are pictorial representations of the relationship between unique pairs of numbers (e.g., heights of students plotted versus age of students).

The emphasis in this program is placed on the understanding of algebra as a generalization of the relationships and patterns in arithmetic. Evaluating expressions; solving equations; the development, interpretation and use of functions as they relate to formulas; and graphing linear functions, make up this strand.

THE ROLE OF CALCULATORS AND COMPUTERS

The rapid growth of microtechnology has had an immense impact on mathematics education. Standard computations and manipulations of algebraic symbols, for example, are now incidental applications of hand-held calculators. Mathematics programs must recognize the pervasiveness of technology by de-emphasizing activities that are much more easily replicated by computers, calculators and, in the future, by as yet unknown technologies. Emphasis must be placed on problem solving and on understanding concepts and relationships. Technologies such as computers and calculators must be used to develop concepts, to explore relationships, to explore patterns, to organize and display data, and to eliminate tedious computations.

COURSE OUTLINE

GRADE 7

Problem Solving

1. Demonstrates an understanding of a problem-solving situation.
2. Demonstrates a willingness to find a solution to a problem.
3. Uses a variety of strategies to solve problems.

The following strategies should be developed throughout the various strands of the program and within the problem-solving framework:

- a. **Understanding the problem**
 - knows the meaning of all the words in the problem
 - identifies key words
 - draws a diagram
 - classifies information as insufficient or extraneous
 - restates the problem in own words
 - uses concrete manipulatives
 - looks for a pattern
 - considers an alternative interpretation
- b. **Developing a plan (choosing a strategy)**
 - guesses and checks - improves the guess
 - chooses and sequences mathematical operations
 - acts out or simulates the problem
 - applies a pattern
 - uses a simpler problem
- c. **Carrying out the plan**
 - applies selected strategies
 - presents ideas clearly
 - documents the process
 - works with care
 - works in a group situation

d. Looking back

- determines if the answer is reasonable
- explains the answer in oral and written form
- states the solution to the problem
- restates the problem with the answer
- considers other possible solutions to the problem
- looks for other ways to solve the problem
- discusses solution process with others

Number Systems and Operations

1. Applies and practises problem-solving skills in new situations.
2. Uses mental computation, paper-and-pencil algorithms, estimation and calculators to perform computations.

A. Whole Numbers

1. Maintains previously developed skills with whole numbers (place value, standard and expanded forms, adding, subtracting, multiplying and dividing whole numbers).
2. Understands properties of number operations and uses properties and relationships to perform mental computations (e.g., associative, commutative, distributive).
3. Understands that division by zero is undefined.
4. Writes the value of a power (whole number base and exponent).
5. Applies the rules for the order of operations to evaluate expressions.
6. Recognizes prime and composite numbers (limit: primes to 50).
7. Lists the factors for whole numbers up to 200.
8. Expresses a number as a product of its prime factors.
9. Uses a calculator or microcomputer to generate multiples of a given number.
10. Determines whether a number is divisible by 2, 3, 5, 6, 9 or 10.

B. Decimals

1. Maintains previously developed skills with decimal numbers (place value, expanded and standard forms, adding, subtracting, multiplying and dividing decimal numbers).
2. Compares and orders decimal numbers.
3. Rounds decimal numbers.

C. Fractions

1. Maintains previously developed skills with fractions (concept of a fraction, need for fractional numbers, equivalent fractions, basic fractions) at a concrete level.
2. Identifies mixed numbers and improper fractions and converts from one to the other.
3. Orders fractional numbers.
4. Uses concrete manipulatives to demonstrate the addition and subtraction of fractions with and without common denominators.
5. Writes number sentences to describe the addition and subtraction of fractions.
6. Uses concrete manipulatives to demonstrate the multiplication and division of proper fractions.
7. Writes number sentences to describe the multiplication and division of fractions.

D. Integers

1. Maintains previously developed skills with integers (concept of integers, need for integers, ordering of integers).
2. Uses concrete manipulatives to demonstrate the addition of integers.
3. Writes number sentences to describe addition of integers.

Ratio and Proportion

1. Applies and practises problem-solving skills in new situations.

2. Maintains previously developed skills (identifies ratios as ordered pairs of numbers related to concrete situations; uses whole number constants to generate equivalent ratios).
3. Uses concrete manipulatives to construct ratios in the following forms:

$$a:b, a \text{ to } b, \text{ and } \frac{a}{b}$$

4. Verifies the equivalence of two ratios using common multiples or factors:

$$\text{e.g., } \frac{14}{6} \xrightarrow{\div 2} = \frac{7}{3} \xleftarrow{\div 2}$$

5. Finds a missing element of a proportion using a common multiple of the elements:

$$\text{e.g., } \frac{3}{4} \xrightarrow{\times 3} = \frac{x}{12} \xleftarrow{\times 3}$$

6. Identifies percent as a ratio:

$$\text{e.g., } \left(p:100 \text{ or } \frac{p}{100} \right)$$

7. Expresses ratios as percents and decimals and vice versa (limit: ratios in the form $\frac{a}{b}$, where $b = 2, 4, 5, 10, 20, 25, 50$):

$$\text{e.g., } \frac{3}{4} \rightleftharpoons \frac{75}{100} \rightleftharpoons 75\% \rightleftharpoons 0.75$$

8. Finds the percent of a number:

$$\text{e.g., } 15\% \text{ of } 25$$

9. Expresses one number as a percent of another number:

e.g., 12 is what percent of 16?

$$\text{or } \frac{12}{16} = \underline{\hspace{1cm}}\%$$

Measurement and Geometry

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (concepts of linear, perimeter, area, volume, capacity and mass measures in concrete and pictorial forms; determines perimeter and area of right triangles and rectangles, and volumes of rectangular solids without formulas; uses protractor to determine the measure of an angle; transformational geometry).
3. Expresses equivalent measures of SI units (linear).
4. Understands and uses the terms similar and congruent with respect to geometric figures.
5. Understands and uses the term symmetry with respect to geometric shapes (line and turn symmetry).
6. Constructs geometric designs using tools such as a computer, compass, straightedge, ruler or mira.

Data Management

1. Applies and practises problem-solving skills in new situations.
2. Demonstrates a knowledge and understanding of the use and purposes of statistics as it affects daily living.
3. Collects and records data (tally sheets and frequency tables).
4. Understands and uses the term average (mean) as related to practical situations (e.g., test marks).

5. Maintains previously developed skills (interprets data from pictographs, bar graphs, line graphs and circle graphs).
6. Understands when and how to represent data in the form of pictographs, bar graphs, line graphs and circle graphs.

Algebra

1. Applies and practises problem-solving skills in new situations.
2. Understands and uses the term variable and uses variables to describe a concrete situation (e.g., number of jelly beans in a jar).
3. Uses variables to write mathematical expressions to represent practical situations (e.g., age of the students in the class in three years will be $x + 3$ years).
4. Evaluates expressions for given values of the variable (limit: whole numbers, decimals).
5. Uses variables to write mathematical sentences to represent practical situations (e.g., people in a classroom = boys + girls + teachers or $p = b + g + t$).
6. Uses concrete manipulatives to demonstrate the concept of "equals" (i.e., equality).
7. Uses estimation, and guess and test procedures to solve equations of the form:

$$x + a = b, ax = b, ax + b = c, \text{ and } \frac{x}{a} = \frac{b}{c}$$

8. Verifies solutions to equations by substitution.
9. Given ordered pairs, plots points on a coordinate plane.

Problem Solving

1. Demonstrates an understanding of a problem-solving situation.
2. Demonstrates a willingness to find a solution to a problem.
3. Uses a variety of strategies to solve problems. Previously developed strategies are used.

The following strategies should be developed throughout the various strands of the program and within the problem-solving framework:

- a. **Understanding the problem**
 - interprets pictures, charts and graphs
 - asks relevant questions
- b. **Developing a plan (choosing a strategy)**
 - collects and organizes information (charts and graphs)
 - makes diagrams and models
 - experiments through the use of manipulatives
 - breaks the problem into smaller parts
 - works backward
- c. **Carrying out the plan**
 - applies selected strategies
 - presents ideas clearly
 - documents the process
 - works with care
 - works in a group situation
- d. **Looking back**
 - makes and solves similar problems

Number Systems and Operations

1. Applies and practises problem-solving skills in new situations.
2. Uses mental computation, paper-and-pencil algorithms, estimation and calculators to perform computations.

A. Whole Numbers

1. Maintains previously developed skills with whole numbers (operations, order of operations, evaluation of expressions, prime numbers, factorization, divisibility).
2. Finds the greatest common factor.
3. Finds the lowest common multiple.
4. Understands and uses the terms exponent, base, power, squared and cubed and the n^{th} power of a number.
5. Demonstrates the need for scientific notation.
6. Writes numbers in scientific notation, and scientific notation numbers in standard form (limit: positive exponents).

B. Integers

1. Maintains previously developed skills with integers (need for integers, concept of integers, ordering of integers, demonstrates addition of integers with manipulatives).
2. States the additive inverse of any integer.
3. Uses concrete manipulatives to demonstrate the subtraction, multiplication and division of integers.
4. Performs the operations of addition, subtraction, multiplication and division with integers using paper-and-pencil algorithms, estimation, mental computation and a calculator.

C. Rational Numbers

1. Maintains previously developed skills with decimal numbers (place value, operations, ordering, rounding, order of operations).
2. Maintains previously developed skills with fractional numbers (concept of a fraction, equivalent fraction, basic fraction, mixed numbers, improper fraction, ordering fractions, concrete operations with fractions, order of operations).
3. Writes the multiplicative inverse (reciprocal) of a fraction, whole number or integer.
4. Performs the operations of addition, subtraction, multiplication and division with fractions (limit: positive rationals).
5. Demonstrates the need for rational numbers (e.g., subdivides a unit of measure).
6. Recognizes rational numbers as all numbers that can be written in the form:

$$\frac{a}{b} \text{ where } b \neq 0$$

7. Compares and orders rational numbers using $<$, $>$ or $=$.
8. Uses a number line to demonstrate the relationship between whole numbers, integers, fractions and rationals.

Ratio and Proportion

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (understands and constructs ratios, equivalent ratios; finds missing element of a proportion, percent as a ratio, percents as decimals, percents of numbers; and expresses one number as a percent of another).

3. Gives examples of ratios involving situations where the equivalent percent is greater than 100.
4. Converts mixed numbers to percents and vice versa.
5. Given the percent, determines the missing value in applications such as discounts, increases, decreases, or sales tax.
6. Understands and writes rates as the comparison of two numbers with different units (e.g., 15 km/2h or 3 items/\$1).
7. Writes proportions involving rates.
8. Finds the missing element in a proportion involving rates.

Measurement and Geometry

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (linear, area, volume, capacity and mass units of measure; uses geometric tools to measure line segments and angles and to construct geometric designs; transformational geometry).
3. Understands and uses the terms perpendicular and parallel lines.
4. Draws or sketches various polygons using tools such as a computer, compass, straightedge, ruler, protractor.
5. Identifies and classifies polygons according to the number of sides (limit: decagon).
6. Investigates triangles by examining attributes such as measure of angles, measure of sides and lines of symmetry.
7. Investigates quadrilaterals by examining attributes such as measure of sides, measure of angles, lines of symmetry and diagonals.
8. Adds, subtracts, multiplies and divides using SI units of measure.

9. Understands and uses formulas as indirect measures of the perimeter of polygons (includes regular polygons).
10. Understands and uses formulas as indirect measures of the area of polygons (triangles, all parallelograms and trapezoids).
11. Performs an experiment to determine the value of π and understands π as a ratio of the circumference of a circle divided by its diameter.

$$(i.e., \pi = \frac{C}{d})$$

12. Understands and uses the formula $C = \pi d$ as an indirect measure of the circumference of a circle.
13. Uses the formula $A = \pi r^2$ to determine indirectly, the area of a circle given its radius or diameter.
14. Draws or sketches a right rectangular prism.
15. Understands and uses a formula as an indirect strategy for determining the volume of a right rectangular prism or a cube.

Data Management

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (understands the purpose of statistics; interprets data from tables and graphs; draws graphs).
3. Understands and uses the terms bias, sample and population.

4. Distinguishes between a survey and a census, understands when each is used and potential biases that may occur (survey).
5. Recognizes the use and misuse of statistics in society (news reporting, census, polls, etc.).

Algebra

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (variable, evaluation of expressions, concept of equality, plots on a coordinate plane).
3. Identifies and combines like terms.
4. Uses formal procedures to solve equations of the form:

$$x + a = b, ax = b, ax + b = c, ax + bx = c,$$

$$and \frac{x}{a} = \frac{b}{c}$$

(limit: positive rational numbers and integers).

5. Verifies solutions to the equations.
6. Uses substitution and equation-solving techniques to find a missing element of a formula:

e.g., If $p=2$ and $q=0.5$ find c in $p = \frac{c}{q}$
7. Generates a set of ordered pairs in a linear relation.
8. Given a linear relation, constructs a table of values and a graph for that relation.

GRADE 9

Problem Solving

1. Demonstrates an understanding of a problem-solving situation.
2. Demonstrates a willingness to find a solution to a problem.
3. Uses a variety of strategies to solve problems. Previously developed strategies are used.

The following strategies should be developed throughout the various strands of the program and within the problem-solving framework:

a. Understanding the problem

- considers alternative interpretations
- makes assumptions

b. Developing a plan (choosing a strategy)

- formulates an equation
- uses logic or reason
- constructs flow charts
- develops a symbol or code system
- recognizes limits and eliminates possibilities

c. Carrying out the plan

- applies selected strategies
- presents ideas clearly
- documents the process
- works with care
- works in a group situation

d. Looking back

- generalizes solutions
- creates and writes routine and non-routine problems

Number Systems and Operations

1. Applies and practises problem-solving skills in new situations.
2. Uses mental computation, paper-and-pencil algorithms, estimation and calculators to perform computations.

3. Maintains previously developed skills with whole numbers, integers, decimals and fractions (operations, ordering, relationships among systems, need for rational numbers, order of operations).

4. Performs the operations of addition, subtraction, multiplication and division with rational numbers.

5. Applies the rules for order of operations to evaluate expressions involving rational numbers in any of their forms.

6. Converts rational numbers from $\frac{a}{b}$ form to decimal form (limit $b < 10$ or b is a power of 10).

7. Converts rational numbers from decimal form to $\frac{a}{b}$ form (limit: terminating decimals).

8. Computes the square root of whole numbers using estimation and a calculator.

9. Demonstrates the relationship among whole numbers, integers and rational numbers.

10. Understands and uses the following properties (limit: numerical bases and exponents):

- $a^x \times a^y = a^{x+y}$
- $a^x \div a^y = a^{x-y}$
- $(a^x)^y = a^{xy}$
- $a^1 = a$
- $a^0 = 1, a \neq 0$

- $a^{-x} = \frac{1}{a^x}$ (limit: $a = 10$)

11. Writes large and small numbers in scientific notation:

e.g., $0.000\ 08 = 8 \times 10^{-5}$

Ratio and Proportion

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (understands and constructs ratios, rates and proportions; finds the missing element of a proportion; writes ratios as percents; converts fractions and decimals to percents and percents to fraction and decimal forms; finds missing values in commission, sales tax, and discount situations).
3. Converts fractional percents to fraction and decimal forms:

$$\text{e.g., } 12\frac{1}{2}\% = \frac{1}{8} = 0.125$$

4. Finds any one of the missing elements (value or percent) in applications such as simple interest, commission, sales tax, discount, profit and loss, and percent increase and decrease situations.
5. Interprets maps and scale drawings.
6. Uses a scale to construct drawings, maps or pictures.
7. Applies ratio and proportion in practical situations (e.g., uses shadows to find the height of a pole or building; comparative shopping; building a model; computing a test or report card mark based on weighted averages).

Measurement and Geometry

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (linear, area, volume, capacity, and mass units of measure; classification of polygons; perimeter and area of polygons and the circle; volume of a right rectangular prism and cube).
3. Uses concrete manipulatives to determine the sum of the angles in a triangle (180°).

4. Determines the sum of the interior angles in polygons.
5. Uses concrete manipulatives to develop the Pythagorean relationship in right triangles.
6. Applies the Pythagorean relationship to practical situations.
7. Constructs regular polygons using tools such as a computer, ruler, protractor and/or compass.
8. Understands and uses a strategy to determine the area of a regular polygon.
9. Identifies pairs of angles (supplementary, complementary, adjacent and opposite).
10. Uses a compass and a straightedge to construct:
 - a congruent segment
 - a congruent angle
 - a perpendicular bisector of a segment
 - a bisector of an angle
 - a perpendicular to a line
 - angles of 90° , 45° , 60° and 30° .
11. Given nets, constructs right prisms.
12. Classifies right prisms and cylinders.
13. Understands and uses a strategy for finding the surface area of any right prism or cylinder.
14. Understands and uses a strategy for finding the volume of any right prism or cylinder.

Data Management

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (understands purpose, use and misuse of statistics; biases in surveys; represents data in the form of pictographs, bar graphs, line graphs, circle graphs).
3. Analyzes and interprets arguments or conclusions based on statistical information.

4. In data from meaningful situations (e.g., test marks), understands and uses the terms mean, median, mode and range.
5. Distinguishes between a percent and a percentile.
6. Conducts a survey or poll using correct sampling techniques and reports results using an appropriate table, chart and/or graph.
7. Understands and uses the term probability.
8. Expresses the probability of the occurrence of an event from a practical situation or a simple experiment or simulation (e.g., pulling a particular coloured marble out of a bag or socks out of a drawer).

Algebra

1. Applies and practises problem-solving skills in new situations.
2. Maintains previously developed skills (variables; like terms, evaluation of expressions; solving equations; generating and plotting ordered pairs from a given relation).

3. Uses formal procedures to solve equations (using all forms of rationals) of the form:

$$x+a=b, ax=b, ax+b=c, ax+bx=c$$

$$\frac{x}{a} = \frac{b}{c}, ax+b=cx, a(x+b)=c$$

$$\text{and } ax+b=cx+d$$

4. Verifies solutions to equations.
5. Manipulates a given formula to change the subject of the formula:

$$\text{e.g., given } x = \frac{f}{w} \text{ then } w = \frac{f}{x}$$

6. Finds a missing element of a formula through manipulation.
7. Solves inequalities of the form $x+a \geq b$ and $cx \leq d$ (c is positive; direction of inequalities may vary).
8. Verifies solutions to inequalities.
9. Graphs solutions to inequalities on a number line.
10. Given a set of ordered pairs or a table of values, writes the function that determines the relation (limit: linear relations).

D. LEARNING RESOURCES

BASIC LEARNING RESOURCES

GRADE 7

- *Journeys in Math 7* by J.W. Lesage et al. Ginn and Company, 1987.
- *Holtmath, Grade 7* by M.P. Bye et al. Holt, Rinehart and Winston Canada, 1984.

GRADE 8

- *Journeys in Math 8* by R.D. Connely et al. Ginn and Company, 1987.
- *Holtmath, Grade 8* by M.P. Bye et al. Holt, Rinehart and Winston Canada, 1984.

GRADE 9

- *Journeys in Math 9* by W.C. Bober et al. Ginn and Company, 1988.
- *Holtmath, Grade 9* by M.P. Bye et al. Holt, Rinehart and Winston Canada, 1986.

RECOMMENDED LEARNING RESOURCES

Recommended learning resources for mathematics are identified in the *Junior High Mathematics Teacher Resource Manual*, 1988.



PHYSICAL EDUCATION

A. PROGRAM RATIONALE AND PHILOSOPHY

Alberta's secondary schooling process is comprised of a variety of subjects and experiences designed to help all students reach their fullest potential. While the unique contributions of physical education to the school program are motor skill development and physical fitness, physical education is concerned with the whole being and therefore consists of learning modes that are based upon the interrelated cognitive, affective, and psychomotor behaviours of students.

The physical education program, a vital part of the schooling process, features a student-centred learning environment that attempts to meet the needs of all students in order to encourage their optimal development. The program is designed for a wide range of student abilities and, therefore, is comprised of varying activities, progressions in difficulty, and standards of achievement.

Through the provision of knowledge about physical activity and the opportunity to develop physical, social and emotional skills, the physical education program is intended to foster self-initiated participation in physical activities and the formulation of a healthy lifestyle. The student-centred approach, which integrates all three learning domains, provides the opportunity for students to achieve a measure of success, and thereby to enhance their self-concept. In addition, the program has the potential to refine students' social skills in that many of the interaction skills, values, and attitudes promoted by physical activity are transferable to other areas of the students' lives.

A wide variety of learning experiences were carefully structured to meet individual differences in order to ensure that this physical education program has the potential to fulfil its purpose. That is, the program provides students, regardless of ability level, with experiences that encourage them to make wise personal decisions regarding lifelong participation in physical activity. This program can contribute to an active, healthy, and productive adulthood by providing students with the necessary knowledge, physical skills, social and emotional skills, and predisposition to develop and maintain physical fitness and positive attitudes toward lifelong participation in physical activity.

The student-centred philosophy permits adaptation to individual student needs and abilities, including physical and emotional differences. This objective is supported by the considerations provided in the curriculum guide, which are intended to assist teachers in accommodating adolescent male and female social, emotional and physical differences, and learning needs crucial to junior and senior high students' stages of cognitive development.

The rationale and philosophy for physical education in Alberta schools originates from The Goals of Basic Education, adopted by the Alberta Legislative Assembly in 1978, and The Goals of Secondary Education from the *Secondary Education in Alberta* policy statement of June 1985.

B. GOALS AND OBJECTIVES

GOAL 1

THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE STUDENT'S INDIVIDUAL DEVELOPMENT OF MOTOR SKILLS THAT ARE EFFECTIVE, EFFICIENT, AND APPLICABLE TO A WIDE VARIETY OF PHYSICAL ACTIVITIES.

Learner Outcomes

To the extent of their own unique ability, students will develop:

1. locomotor, non-locomotor, and manipulative skills in a wide variety of physical activities suitable for development and recreational purposes;
2. the ability to define, analyze and solve movement problems inherent in a wide variety of physical activities suitable for developmental and recreational purposes.

GOAL 2

THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE STUDENT TO DEVELOP, MONITOR AND MAINTAIN AN APPROPRIATE INDIVIDUAL FITNESS LEVEL.

Learner Outcomes

To the extent of their own unique ability, students will develop:

1. the ability to participate in vigorous activity;
2. appropriate physical fitness in the areas of cardiorespiratory endurance, muscular endurance, strength, and flexibility;
3. the ability to assess and monitor personal physical fitness needs and to design a safe program to meet these needs.

GOAL 3

THE PHYSICAL EDUCATION PROGRAM SHOULD ASSIST THE STUDENT TO UNDERSTAND CONCEPTS BASIC TO PHYSICAL MOVEMENT AND TO APPLY THESE UNDERSTANDINGS TO A VARIETY OF PHYSICAL ACTIVITIES.

Learner Outcomes

To the extent of their own unique ability, students will develop:

1. physical skills, physical fitness, and understanding of scientific principles of movement and the relationship of exercise to personal well-being;
2. knowledge of rules, techniques, strategies, and mechanical, physiological and psychological concepts as they relate to various physical activities;
3. essential safety skills, practices, and techniques necessary in physical activity.

GOAL 4

THE PHYSICAL EDUCATION PROGRAM WILL ASSIST THE STUDENT TO DEVELOP POSITIVE PERSONAL ATTRIBUTES.

Learner Outcomes

Students will develop:

1. a positive, realistic self-image, understanding and accepting themselves with their strengths and limitations;
2. a positive and responsible attitude toward and independence in pursuing a wide variety of desirable recreational habits, interests, and skills which will lead to wise and satisfying use of leisure time;

3. a sense of achievement, joy, pleasure and satisfaction in life through a variety of wholesome physical activities;
4. sensitivity toward and appreciation of the beauty of skilled movement;
5. appreciation of their own growth and development in social, emotional, ethical and physical areas.

GOAL 5

THE PHYSICAL EDUCATION PROGRAM WILL ASSIST THE STUDENT TO DEVELOP POSITIVE INTERPERSONAL SKILLS TRANSFERABLE TO OTHER AREAS OF THEIR LIVES.

Learner Outcomes

Students will develop:

1. appreciation of the worth of others, and respect for their rights;
2. consideration and understanding of the needs, strengths and limitations of others;
3. attitudes and skills of cooperation and conciliation essential to fair play, competition and team interaction, as well as to leadership and the ability to follow a leader;
4. an appreciation of and ability to act in accord with game etiquette and the values of loyalty, honesty, dependability, kindness and generosity.

C. CONTENT

SECONDARY PHYSICAL EDUCATION PROGRAM MODEL

The Secondary Physical Education Program is comprised of seven dimensions: aquatics, dance, fitness, games, gymnastics, individual activities and outdoor pursuits. By engaging in a balanced selection of activities drawn from each dimension at levels appropriate to each student's unique ability and aptitude, students will develop their physical skills, knowledge of physical movement, positive personal attributes, and interpersonal skills and attitudes. Confidence, respect for oneself and others, and a predisposition toward lifelong engagement in physical activity, with the attendant rewards of health, self-esteem and positive social relationships, are the long-term objectives of the physical education program.

PROGRAM BALANCE

A well-balanced program provides opportunities for students to participate in activities from all seven dimensions, appreciating local or individual considerations such as access to facilities, religious persuasion, or health. A balanced physical education program drawn from each of the seven dimensions will provide a broad and varied program of physical education.

Activity selection and time allocation will be determined by the needs and development of the students, by the program objectives, and by many other factors.

The balance may also differ from grade to grade depending on such factors as individual needs, time and facilities.

REQUIRED/ELECTIVE COMPONENTS

Each dimension of the Grades 7 through 9 physical education program must receive no less than 10% of the available instructional time at each grade level. The required component of 80% of the available instructional time therefore allows the remaining 10% to be used for extension of one or

more dimensions. The 20% elective component can be applied to one or more of the dimensions for enrichment or remediation. This 20% is not an addendum to the required component but should be utilized throughout the duration of the course as indicated by student needs and interests.

SKILL PROGRESSION WITHIN EACH ACTIVITY

The skills for each activity are developed into four sequential levels. (The activities and levels are presented in the curriculum guide.) Each level may serve as a stage to introduce and develop some of the necessary skills. Subsequent levels should reinforce the existing skills.

It should be noted that neither the skills nor levels are intended to be rigidly interpreted. They serve as guides for teachers in the modification and development of programs tailored to their individual circumstances.

The progressions suggested should not be tied to grade levels, as they merely represent a suggested sequence. Activity instruction normally begins with simple activities and progresses to the more complex. Starting points and progressions are dependent upon individual participants and are not necessarily determined by grade level. Natural ability and skills gained from previous learning experiences both in and out of school need to be assessed in order to develop a program based on individual student needs.

APPLICATION OF SECONDARY PHYSICAL EDUCATION PROGRAM

The physical education program is intended to provide students in Grades 7 through 9 with an opportunity to develop skills in a variety of physical activities at levels of proficiency reflective of each student's unique abilities. It is therefore mandatory that all seven dimensions of the program be addressed in the required component of each course in Grades 7 through 9 notwithstanding the exemptions specified on the following page.

EXEMPTIONS

As an integral part of the well-balanced physical education program, each dimension utilizes carefully selected activities to

contribute to the development of the physically educated individual. In the following specified circumstances, however, exemptions may be warranted:

Program Exemptions

CATEGORY	CONDITIONS FOR EXEMPTION	PROCEDURES AND APPROVAL PROCESS	ALTERNATIVE EXPERIENCES
Individual	1. Religious beliefs	1. Statement in writing from parent to principal	<ul style="list-style-type: none">When exemption is granted, alternative activities consistent with the goals and objectives of the physical education program should be substituted where practicable.
	2. Medical	2. Certification by medical officer with statement of activities to be avoided	
Class, grade, school	<ul style="list-style-type: none">Access to facilitiesReligious beliefs.	<ul style="list-style-type: none">Initiated by board or parentApproved by local school board or school governing authorityExemption shall be registered on the Secondary School Program Plan and approved by the Alberta Education Regional Office serving the area.	

AQUATICS DIMENSION LEARNER OUTCOMES

Aquatics emphasize the use of a unique environment to promote the safe pursuit of water-related activities. Activities included are: diving, lifesaving, skin diving, swimming, synchronized swimming, water games, and water safety.

Aquatics is considered a vital dimension of a well-planned physical education program. A minimum of at least one exposure to a water and water safety program is suggested during the secondary years. Decisions as to when that experience should occur will depend upon the time needed, the availability of a facility, qualified personnel, and transportation.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the aquatics dimension. Acknowledging individual differences, each student will develop:

- | | | |
|-----|----|--|
| P/A | 1. | the ability to feel comfortable and confident in the water while displaying principles of buoyancy, propulsion techniques, water entries, and drownproofing skills; |
| P | 2. | the ability to swim a variety of distances and to take part in selected water games and sports; |
| P | 3. | muscular strength and total fitness through participation in water activities; |
| C | 4. | an understanding of safety and lifesaving skills associated with water activities; |
| P/C | 5. | the ability to use self-rescue skills and to assist persons in danger on, in or near water; |
| P/C | 6. | the ability to identify and participate in a variety of vigorous fitness-inducing activities that relate to or complement selected aquatic activities; |
| C | 7. | an understanding of the origin and history of water activities and the terminology, mechanical principles and current developments associated with water activities; |

- | | | |
|---|----|--|
| A | 8. | an appreciation of and respect for the water environment; |
| A | 9. | an appreciation of the unique contribution of aquatics to personal fitness and to safety in lifetime water-related activities. |

The dimension of aquatics may be exempted by a school if a facility is not accessible. This should be noted under special circumstances on the Secondary School Program Plan.

DANCE DIMENSION LEARNER OUTCOMES

Dance emphasizes the expressive aspect of movement. Activities included are: folk dance, modern dance, social and ballroom dance, jazz and square dance.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the dance dimension. Acknowledging individual differences, each student will develop:

- | | | |
|-----|----|--|
| P | 1. | body awareness, space awareness, and quality of movement associated with one or more of folk, social, square, modern, or jazz dance; |
| P/C | 2. | the ability to create and perform individual, partner, and/or group dance compositions in one or more dance forms with or without music; |
| P | 3. | the individual physical capacity to perform dances of a vigorous nature that have the potential to contribute to total fitness; |
| P/C | 4. | the ability to identify and participate in a variety of vigorous fitness-inducing activities that relate to or complement selected dance activities; |
| P | 5. | the ability to participate in vigorous physical activities to music; |
| C | 6. | an understanding of the origin and history of dance forms and the etiquette, terminology, mechanical principles and current developments in dance; |

- C 7. an ability to analyze the various elements of rhythmical movement in dance;
- A 8. an appreciation of the opportunities for self-expression, creativity, individual interpretation, physical fitness, and social interaction provided through various dance forms;
- A 9. an appreciation of dance as an enjoyable lifetime activity;
- A 10. social skills which promote acceptable standards of behaviour and positive relationships with others;
- A 11. a vital interest in the achievement and maintenance of one's personal fitness potential.

Where local conditions such as religious persuasion preclude offering the dance dimension on a school basis, this should be noted under special circumstances on the Secondary School Program Plan.

FITNESS DIMENSION LEARNER OUTCOMES

Fitness develops the individual's ability to function at an optimal level and promotes understanding of the various body systems and how they are affected by physical activity. The pursuit of physical fitness is an integral part of the other six dimensions. Therefore, it should not be limited to independent units but should also be integrated into the other six dimensions. Activities included are: aerobic training, calisthenics, circuit training, first aid, fitness, posture, and weight training.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the fitness dimension. Acknowledging individual differences, each student will develop:

- P 1. the ability to participate in vigorous physical activities that will enhance personal fitness development throughout the total physical education program;

- P/C 2. the ability to assess and apply acceptable training principles in designing personal programs to improve the health related components of cardiorespiratory efficiency, muscular strength, muscular endurance, flexibility, body composition, and posture;
- P/C 3. the ability to assess and apply acceptable training principles in designing personal programs to improve the motor fitness components of agility, balance, coordination, power, reaction time, and speed;
- P/C 4. the ability to plan, monitor and participate in a personal fitness program that demonstrates the adaptation and refinement of varying activities so they may be utilized in school, home or community settings;
- C 5. an understanding of the safety precautions common to fitness activities;
- C 6. an understanding of the history, terms, current developments in and components of functional motor fitness and the training principles, types of activities, and benefits associated with each;
- C 7. an understanding of the relationship of nutrition, rest, relaxation, exercise, and sports to physical fitness;
- C 8. a knowledge and application of the principles of first aid;
- A 9. an enjoyment of vigorous physical activity;
- A 10. a vital interest in the achievement and maintenance of one's personal fitness potential.

GAMES DIMENSION LEARNER OUTCOMES

Games emphasize projecting, receiving and retaining skills, footwork, agility and body coordination, and elements of offence and defence. Games included are: badminton, basketball, broomball, curling, field hockey, floor hockey, flag football, handball, ice hockey, lacrosse, netball, racquetball, ringette, rugby, soccer, softball, squash, table tennis, team handball, tennis, and volleyball.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the games dimension. Acknowledging individual differences, each student will develop:

- P 1. the ability to use acquired physical skills in a wide variety of game situations;
- P 2. the ability to employ sound mechanical principles efficiently in the projection, reception and retention of objects under game conditions;
- P 3. the ability to apply acceptable team/individual and offensive/defensive concepts in the creation or elimination of personal and team space in game situations;
- P/C 4. the ability to identify and participate in a variety of vigorous fitness-inducing activities that relate to or complement selected games;
- P 5. an understanding of the origin and history of a variety of games and of the terminology, mechanical principles, team/individual skills, strategies and techniques employed in a variety of games;
- C 6. an understanding of rules, etiquette, and safety precautions employed in a variety of games;
- A 7. an appreciation of and respect for the effort, safety and abilities of oneself, teammates, opponents, officials, and instructors;

- A 8. an understanding and appreciation of etiquette and self-control in game situations;
- A 9. an appreciation of the necessity to accept leadership/followership roles in cooperative and competitive situations;
- A 10. confidence and a desire to attempt new games or activities;
- A 11. an appreciation of the role of games in the achievement and maintenance of one's personal fitness potential;
- A 12. social skills which promote acceptable standards of behaviour and positive relationships with others.

GYMNASTICS DIMENSION LEARNER OUTCOMES

Gymnastics activities emphasize body management skills that develop strength, flexibility and fluency of movement. Activities included are: dual balance, educational gymnastics, artistic gymnastics, modern rhythmic gymnastics, pyramid building, rope climbing, trampoline, and tumbling.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the gymnastics dimension. Acknowledging individual differences, each student will develop:

- P 1. the ability to perform ambidextrous movements that result in "balanced" body strength and mobility;
- P 2. the ability to demonstrate mechanical principles and motor patterns in the creation and performance of artistic/rhythmic/educational gymnastic sequences both on the floor and in formal/informal equipment arrangements;
- P 3. correct safety techniques where individual and/or cooperative assistance is appropriate;

- | | | |
|-----|-----|--|
| P/C | 4. | the ability to identify and participate in a variety of vigorous fitness-inducing activities that relate to or complement selected gymnastics activities; |
| C | 5. | understanding of the origin and history of gymnastics and the etiquette, rules, terminology, safety techniques, mechanical principles and current developments that apply to gymnastics; |
| C | 6. | an understanding of the factors of space, weight, time and flow as they apply to gymnastics; |
| C | 7. | the ability to monitor improvement and set personal performance goals in gymnastics activities; |
| C | 8. | the ability to design and evaluate gymnastics routines; |
| A | 9. | an appreciation of and respect for the safety, efforts and abilities of oneself, teammates, opponents, officials and instructors; |
| A | 10. | the confidence and desire to participate willingly as a performer and/or organizer in class events; |
| A | 11. | perseverance, self-confidence, and individual initiative; |
| A | 12. | an appreciation of the role of gymnastics in the achievement and maintenance of one's personal fitness potential. |

INDIVIDUAL ACTIVITIES DIMENSION LEARNER OUTCOMES

Individual Activities are those which by their nature can be pursued by an individual with or without a partner or opponent. Activities included are: archery, cross-country running, five-pin bowling, ten-pin bowling, golf, track and field, weightlifting, and wrestling.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the individual activities dimension. Acknowledging individual differences, each student will develop:

- | | | |
|-----|----|--|
| P | 1. | the basic skills, techniques, and form associated with selected individual activities; |
| P | 2. | the ability to use acquired physical skills in a wide variety of individual activities; |
| P/C | 3. | the ability to identify and participate in a variety of fitness-inducing activities that relate to or complement selected individual activities; |
| C | 4. | understanding of the origin and history of various individual activities and the etiquette, rules, terminology, safety concepts, mechanical principles and current developments that apply to various individual activities; |
| C | 5. | the ability to monitor improvement and set personal goals in various individual activities; |
| A | 6. | an appreciation of and respect for the safety, effort, and abilities of oneself, partners, opponents, officials, and instructors; |
| A | 7. | confidence and a desire to attempt new individual activities; |
| A | 8. | increased self-confidence, self-sufficiency, and individual initiative; |
| A | 9. | an appreciation of the role of individual activities in the achievement and maintenance of one's personal fitness potential. |

OUTDOOR PURSUITS DIMENSION LEARNER OUTCOMES

Outdoor Pursuits emphasize physical activities requiring wise and careful use of the natural environment. Activities included are: alpine skiing (downhill), backpacking/hiking, camping, canoeing, cycling, Nordic skiing (cross-country), orienteering, sailing, skating, snowshoeing, and wilderness living skills.

Each dimension provides psychomotor (P), cognitive (C), and affective (A) development. The following outcomes identify the knowledge, attitudes, and physical and social skills related to the outdoor pursuits dimension. Acknowledging individual differences, each student will develop:

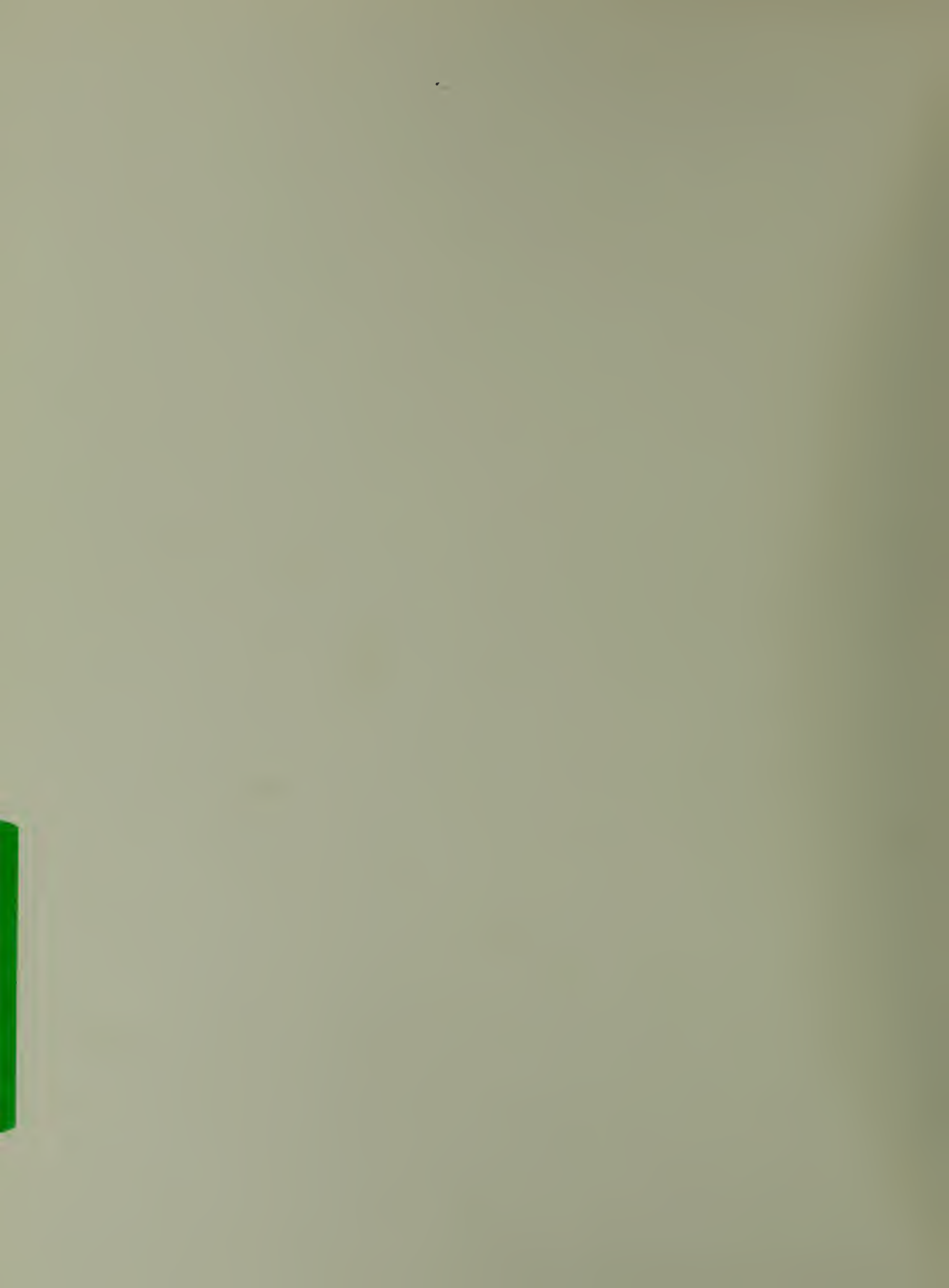
- | | | |
|-----|----|---|
| P | 1. | the basic skills, techniques and form associated with one or more outdoor activity; |
| C/P | 2. | the ability to identify and pursue a variety of fitness-inducing activities that relate to or complement selected outdoor pursuits; |

- | | | |
|---|----|--|
| C | 3. | an understanding of the origin and history of outdoor pursuits and the terminology, rules, safety concepts, mechanical principles and current developments that apply to outdoor pursuits; |
| A | 4. | an appreciation and respect for the natural environment; |
| A | 5. | an awareness of the potential of the natural environment for worthwhile lifetime outdoor pursuits in all seasons; |
| A | 6. | social skills that promote acceptable standards of behaviour and positive relationships with others; |
| A | 7. | increased self-confidence, self-sufficiency, and individual initiative; |
| P | 8. | an appreciation of the role of outdoor pursuits in the achievement and maintenance of one's personal fitness potential. |

D. LEARNING RESOURCES

RECOMMENDED AND SUPPLEMENTARY LEARNING RESOURCES

A variety of learning resources have been identified for recommended and supplementary teacher reference for each of the seven dimensions. These are listed in Appendices A and B of the *Junior-Senior High School Physical Education Curriculum Guide*, 1988.



ART

A. PROGRAM RATIONALE AND PHILOSOPHY

Art education is concerned with the *organization of visual material*. A primary reliance upon visual experience gives an emphasis that sets it apart from the performing arts. Acquiring proficiency in art requires systematic instruction in *how we see, interpret and make sense of visual stimuli*. It requires an understanding of how others interpret the visual messages which are products of this kind of activity. It requires an education in the use of traditional and contemporary tools, materials and media.

Art education is concerned with *having individuals think and behave as artists*. For the purposes of art education, the term "artist" is equally valid to describe one who has worked for a lifetime or someone who is a relative beginner. Ultimately, art is accessible to all individuals. Its practice results in changing the individual, in changing the relationship among individuals or in changing the social-physical environment.

Art education is concerned with *pointing out the values that surround the creation and cherishing of art forms*. Art is not merely created, it is valued. The relative values given to art products not only tell us about those who produce

them, but introduce notions of how values have changed over time. Learning to see gives us the means to view the work of others and perhaps to relate that to our own works. In this case, however, searching for organization may be helped by knowledge about other people's priorities.

Art education deals with *ways in which people express their feelings in visual forms*. Art takes the human condition as the focus of study. Persons involved in the visual arts reflect upon and externalize their personal feelings and intuitions or those of their fellow human beings. As artists, they share this ability with the writer, the poet and the musician. In making parallels and discovering relationships with the performing and literary arts we gain a sense of common purpose.

Art education deals with *making and defending qualitative judgments about art works*. Becoming a perceptive critic attunes the individual to the unique contribution of the artist. By adopting the stance of critic we can develop methods of qualitative differentiation. We gain a sense that not all art is the same, and we are able to articulate reasons for preferring one work over another.

DRAMA

A. PROGRAM RATIONALE AND PHILOSOPHY

At the time that SECONDARY DRAMA was revised just prior to 1971, a statement of philosophy was not recorded. When the program is revised again the philosophy will be made explicit and inserted here.

MUSIC: CHORAL GENERAL INSTRUMENTAL

A. PROGRAM RATIONALE AND PHILOSOPHY

RATIONALE FOR FINE ARTS

The fine arts embrace music, art and drama without obscuring their uniqueness. Each has a body of content, partly derived from tradition and partly developed from the insights and interests of those involved. Each has its own mode of expression and makes its own contribution to society, necessitating the inclusion of the arts as separate subject areas in the school program.

There are fundamental principles that apply to all three. Specifically, the student is involved as a creator, a performer, an historian, a critic and a consumer. Throughout the grades, an articulated fine arts program should enhance the depth and breadth of expression and intuitive response. The maturing student learns to appreciate, to understand, to create and to criticize with discrimination products of the mind, the voice, the hand, and the body.

PHILOSOPHY FOR MUSIC EDUCATION

The systematic development of musical skills, knowledge and perception contributes to the total development of the individual.

The sense of meaning in music can be developed by the student as:

Performer:

Performance is an active process involving the development and application of musical skills, knowledge and perceptions.

Listener, evaluator, consumer, historian:

These experiences develop an understanding of music and musicians of the past and present.

Composer:

The organization of the elements of music into an intrinsically satisfying composition generates aesthetic creativity and perception.

Music is accessible to all, and as students become sensitive to its expressive elements, they may develop insight into human feelings. Music education should begin at an early age and continue to encourage creative expression through performance, listening and composition.

B. GOALS AND OBJECTIVES

GOALS OF THE SECONDARY MUSIC PROGRAM

- To develop skills in listening, performing and using notational systems.
- To encourage students to strive for musical excellence, individually and as members of groups.
- To enable students to understand, evaluate and appreciate a variety of music.
- To provide experiences that will foster the development of self-expression, creativity and communication through music.
- To make students aware of the history of music and the implications of music in our society.

GOALS OF THE CHORAL MUSIC PROGRAM

The Choral Music Program will help students to develop competencies and to strive for excellence within the limits of their individual capabilities, in the following areas:

SINGING

To discover, develop and evaluate their talents and abilities relative to singing, and to establish and reinforce correct vocal techniques and skills.

READING

To interpret rhythm, melody, harmony, form, and expression as they appear in musical notation through both cognitive and psychomotor responses.

LISTENING

To develop the ability to make aesthetic judgments based on critical listening and analysis of music.

CREATING

To develop an additional avenue of self-expression by composing, improvising, and interpreting music.

VALUING

To become aware of the history of music and the implications of music in our society with respect to music careers, its avocational and leisure uses, and to grow in the appreciation, understanding, and enjoyment of music as a source of personal fulfilment.

PLAYING

To develop functional instrumental skills as an aid to individualized vocal practice.

GOALS OF THE GENERAL MUSIC PROGRAM

The General Music Program will help students to develop competencies and to strive for excellence within the limits of their individual capabilities, in the following areas:

SINGING/PLAYING

To explore and develop musical skills, using a wide variety of traditional and contemporary music.

LISTENING

To develop the ability to make aesthetic judgments based on critical listening and analysis of music.

CREATING

To learn how music is organized through improvising, arranging and composing for a personal musical experience.

VALUING

To make students aware of the implications of music in our society with respect to music careers; its avocational and leisure uses; and to grow in the appreciation, understanding, and enjoyment of music as a source of personal fulfilment.

GOALS OF THE INSTRUMENTAL MUSIC PROGRAM

The Instrumental Music Program will help students to develop competencies and to strive for excellence within the limits of their individual capabilities, in the following areas:

PLAYING

To discover, develop, and evaluate their talents and abilities relative to playing a musical instrument, and to establish and reinforce correct techniques and skills.

LISTENING

To develop the ability to make aesthetic judgments based on critical listening and analysis of music.

READING

To interpret rhythm, melody, harmony, form, and expression as they appear in musical notation through both cognitive and psychomotor responses.

CREATING

To develop an additional avenue of self-expression by composing, improvising, and interpreting music.

VALUING

To make students aware of the implications of music in our society with respect to music careers, its avocational and leisure uses, and to grow in the appreciation, understanding, and enjoyment of music as a source of personal fulfilment.

A summary of the content of the Junior High Choral Music Program, the Junior High Instrumental Music Program and the Junior High General Music Program follows. For a description of specific objectives and learner outcomes, refer to the curriculum guide developed for each of the three programs.

C. CONTENT

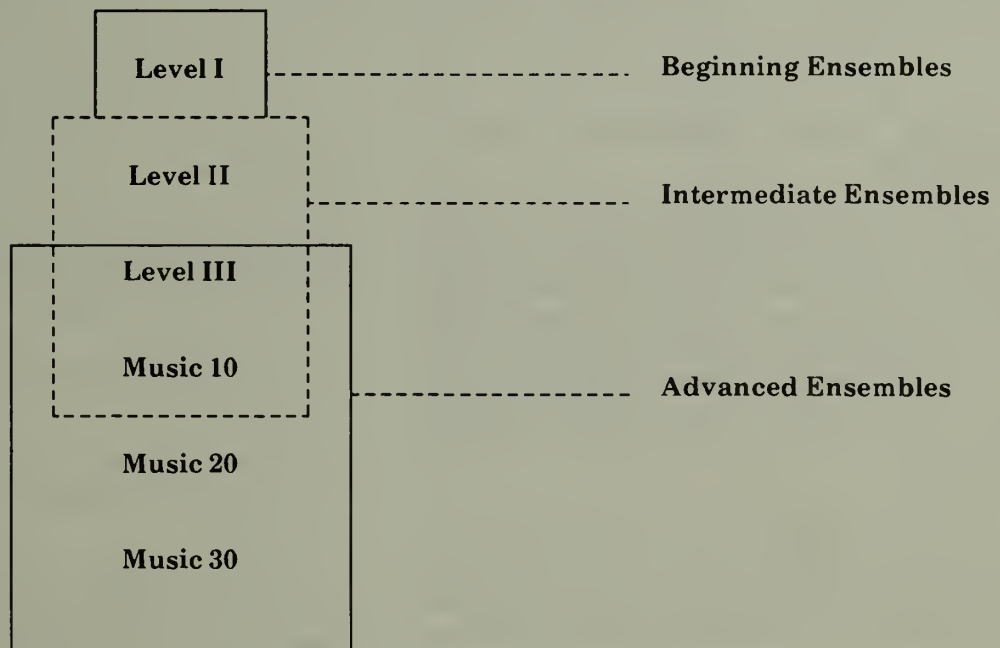
JUNIOR HIGH CHORAL MUSIC PROGRAM

The components of the Junior High Choral Music Program consist of vocal, aural, theoretical, interpretive and synthesis skills. These skills are divided into three levels. Levels I, II and III correspond to the first, second and third years of the program; typically Grades 7, 8 and 9. Designed as complementary courses

(75 hours per year minimum), it is expected that Level III will be achieved by the end of three years in the program. This constitutes the expected competency entry level for Music 10.

It should be noted that the Junior High Choral Music Program goes much beyond the rehearsal of music for performance. It is intended to develop skills that will prepare students for the Senior High Choral Music Program.

SECONDARY MUSIC ORGANIZATIONAL CHART



CURRICULAR COMPONENTS OF THE JUNIOR HIGH CHORAL MUSIC PROGRAM

The goals of the Junior High Choral Music Program are achieved through the use of the following curricular components:

	VOCAL SKILLS	AURAL SKILLS		THEORETICAL SKILLS	INTERPRETIVE SKILLS	SYNTHESIS SKILLS
		EAR TRAINING	SIGHT SINGING			
SINGING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
LISTENING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
READING	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CREATING				<input type="checkbox"/>	<input type="checkbox"/>	
VALUING	<input type="checkbox"/>					<input type="checkbox"/>
PLAYING				<input type="checkbox"/>		

☐ Indicates areas of emphasis.

JUNIOR HIGH GENERAL MUSIC PROGRAM

The Junior High General Music Program consists of individual modules within a three-level program. Each module represents a minimum of 15 hours of classroom instruction. A minimum of three modules should be taught at each level. The curriculum is purposely flexible in order to meet the needs of teachers and students within a variety of facilities and school timetable structures.

Many of the modules are self-contained and may be used independently of other modules. Some could be taught concurrently with other modules, while others must be taught in sequence.

The modules concentrate on performance, elements/structure and perspective and are identified as most suitable for either Level I, II and/or III. These are suggested designations and teachers may use the modules in a variety of sequences dependent upon teacher ability and interest, student ability and interest, and constraints of facilities, equipment and time.

Modules concentrating on performance emphasize:

- limited sound production and manipulation
- performance concentration in areas not included in the choral or instrumental program (e.g., guitar, ukulele).

Modules concentrating on elements/structure emphasize:

- rudiments of music
- organization of the structural elements of music.

(NOTE: Teachers are strongly advised to include an elements/structure module in the early part of a course of study; the module may be accelerated if student background indicates a prior grasp of content.)

Modules concentrating on perspective emphasize:

- the role of music in our lives
- national and ethnic music
- historical/stylistic perspective.

The chart that follows provides assistance in making selections from the modules when designing a course of study.

MODULES OF THE JUNIOR HIGH GENERAL MUSIC PROGRAM

MODULES	AREAS OF CONCENTRATION TIME ALLOTMENT		
LEVEL I	PERFORMANCE	ELEMENTS/ STRUCTURE	PERSPECTIVE
The Beginnings of Rock Music Black Music Elements of Music (Introductory) Exploring Vocal Sounds Handbells (Introductory) Recorder (Introductory) Sources of Musical Sounds Ukulele (Introductory)	• • • • •	•	• • •
LEVEL II			
Careers in Music Composing Music Elements of Music (Intermediate) Guitar and String Bass Handbells (Intermediate) Music of Canada Music of Latin America Musical Notation (Introductory) Recorder (Intermediate) Ukulele (Intermediate)	• • • • •	• •	• • • •
LEVEL III			
Artistic Expression Electronic Music Elements of Music (Advanced) Handbells (Advanced) Music of the Orient Music of the United States Musical Notation (Intermediate) Musical Theatre Program Music	• • • •	• • • •	• • • • •

JUNIOR HIGH INSTRUMENTAL MUSIC PROGRAM

The Junior High Instrumental Music Program is designed as a sequential and developmental approach to music instruction. Each level grows from those experiences previously presented. The program should be flexible, providing for several levels of student ability and achievement.

The Junior High Instrumental Music Program may consist of either a wind-percussion program or strings program.

The goals of the wind-percussion program are achieved through the development of aural skills, technical/theoretical skills, interpretive skills and synthesis skills. These skills are divided into three levels: Levels I, II and III correspond to the first, second and third years of the program; typically Grades 7, 8 and 9. Designed as complementary courses (75 hours per year minimum), it is expected that by the end of three years in the program, Level III will be achieved. This constitutes the expected competency entry level for Music 11 in senior high.

The strings program consists of aural-spatial skills, technical skills, theoretical skills, history of string development, and interpretive skills (musicianship). These components are divided into six levels.

It is expected that by the end of Level III, the students will have the necessary aural skills that will enable them to play with good tone and intonation, a technique that will give them sufficient versatility to interpret and apply the various bowing styles and scale patterns to the literature and a good basic understanding of the higher positions as well as a working knowledge of vibrato.

By the end of Level VI, all of the above mentioned skills should be at a much higher level of proficiency and understanding. It is also expected that the student will be able to perform more advanced techniques in Levels IV through VI.

CURRICULAR COMPONENTS OF THE JUNIOR HIGH INSTRUMENTAL MUSIC PROGRAM

The goals of the Junior High Instrumental Music Program are achieved through the use of the following curricular components:

	AURAL SKILLS	TECHNICAL/THEORETICAL SKILLS		INTERPRETIVE SKILLS	SYNTHESIS SKILLS
		TECHNICAL	THEORETICAL		
PLAYING	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
LISTENING	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
READING	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
CREATING			<input type="checkbox"/>	<input type="checkbox"/>	
VALUING	<input type="checkbox"/>				<input type="checkbox"/>

☐ Implies emphasis in that particular area.

REQUIRED/ELECTIVE COMPONENTS

The required component encompasses the knowledge, skills and attitudes that all students in the program should be expected to acquire.

The elective component is designed to provide opportunities to adapt and enhance the required portion of the program to meet the diverse needs and capabilities of individual students. It encourages the adaptation of content, teaching strategies, instructional time, evaluation activities and learning resources to meet specific

individual student and/or group needs. The elective component provides for enrichment and for additional assistance to individual students as necessary.

The maximum time allotment for the elective component of the Junior High Music Program shall be 30 percent of the instructional time.

The following list of strategies may be employed in order to address the elective component of the curriculum. These strategies are recognized as an integral part of a successful music program.

The Elective Component

ENRICHMENT

● Explore Required Concepts More Deeply	● Explore Alternative Topics	● Provide More Cognitively Demanding Activities	● Have Students Define Their Own Issues	● Encourage Cross-age Tutoring
<ul style="list-style-type: none">- repertoire- solos- small ensembles- research projects- master class- using recordings for extension and analysis of studied pieces- computer (theory, MIDI tutors)- guest artists	<ul style="list-style-type: none">- repertoire- sight reading- doubling parts- library research- jazz- orchestra- computer- keyboard- electronic music- avant-garde/aleatoric music	<ul style="list-style-type: none">- arranging/composing- improvising- researching- critiquing (records, performances, etc.)	<ul style="list-style-type: none">- project (research)- private lessons- concert attendance- videos	<ul style="list-style-type: none">- section leaders- small ensembles- student conductors- student demonstrators- peer coaching

REMEDATION

- | | | | | |
|--|---|--|--|---|
| <ul style="list-style-type: none">● Enhance Self-Confidence<ul style="list-style-type: none">- repertoire- clinics- music field trips- concert tours- switch sections- solos- small ensembles- workshops | <ul style="list-style-type: none">● Provide Concrete Examples/Visual Aids<ul style="list-style-type: none">- listening exercises- videos- filmstrips/films- teacher demonstration- student demonstration | <ul style="list-style-type: none">● Use More Highly Structured Teaching Procedures<ul style="list-style-type: none">- alternative resource materials- études- vocalizing- eurythmics | <ul style="list-style-type: none">● Provide Less Cognitively Demanding Activities<ul style="list-style-type: none">- repertoire selection- instrument part assignment- review known repertoire- reduce tempo | <ul style="list-style-type: none">● Have Students Define Their Own Issues<ul style="list-style-type: none">- student set goals |
| <ul style="list-style-type: none">● Use Varied Modes of Communication<ul style="list-style-type: none">- visual/ image (picture)/ gesture (action)- aural- written- movement | <ul style="list-style-type: none">● Provide Feedback Loops<ul style="list-style-type: none">- peer evaluation- teacher evaluation- audio-recording analysis- video-recording analysis | <ul style="list-style-type: none">● Encourage Practice<ul style="list-style-type: none">- private practice- practice techniques- repetition | | |

D. LEARNING RESOURCES

BASIC LEARNING RESOURCES

CHORAL MUSIC

An Introduction to Sight Singing: A Structured Approach to Reading Music

Arkis, Stanley and Schuckman, Herman. New York: Carl Fischer Inc., 1967.

Practical Theory

Feldstein, Sandy. Sherman Oaks, California: Alfred Publishing Co. Inc., 1982 (print), 1984 (diskettes).

Student Textbook/Workbooks:

Volume 1

Volume 2

Volume 3

Complete (Teacher's Edition; also contains Volumes 1, 2 and 3)

Software:

Volume 1 and 2 Diskettes

Volume 2 and 2 Diskettes

Volume 3 and 2 Diskettes

Complete (Teacher's Edition; contains Volumes 1, 2 and 3 and 6 Diskettes)

Note: Also for General and Instrumental Music Programs.

Theory for Beginners

Wharram, Barbara. Oakville, Ontario: The Frederick Harris Music Company, 1974.

Note: Also for General Music Program.

GENERAL MUSIC

The Spectrum of Music with Related Arts

Marsh, Mary Val, Rinehart, Carroll A., and Savage, Edith J. New York: Macmillan Publishing Co., Inc., 1979, 1980.

- Red Student Book (Level 7) and Blue Student Book (Level 8)
- Teacher's Edition - Red Book (Level 7) and Blue Book (Level 8)
- Records - Parts 1 and 2 (Level 7) and Parts 1 and 2 (Level 8)
- Piano Accompaniments - Red Book (Level 7) and Blue Book (Level 8)

These learning resources are for use with the following modules:

- | | |
|-----------|--|
| Level I | Red Book:
The Beginnings of Rock Music, Black Music, Elements of Music (Introductory), Exploring Vocal Sounds, Recorder (Introductory), Sources of Musical Sounds |
| Level II | Red Book:
Careers in Music, Guitar and String Bass, Music of Latin America
Blue Book:
Composing Music |
| Level III | Blue Book:
Artistic Expression, Electronic Music, Music of the Orient, Music of the United States, Program Music |

Classroom Recorder Method, Book One

Cowan, Don. Toronto, Ontario: Berandol Music Ltd., 1973.

This learning resource is for use with the following modules:

- | | |
|----------|-------------------------|
| Level I | Recorder (Introductory) |
| Level II | Recorder (Intermediate) |

Classroom Ukulele Method, Book One Revised

Doane, J. Chalmers. Waterloo, Ontario: Waterloo Music Company Ltd., 1980, 1977.

- Student Book
- Teacher's Guide

These learning resources are for use with the following modules:

- | | |
|----------|------------------------|
| Level I | Ukulele (Introductory) |
| Level II | Ukulele (Intermediate) |

The Harris Guitar Method Volume 1

Smith, Peter. Oakville, Ontario: Frederick Harris Music, 1986.

- Student Book

Note: An accompanying cassette tape has been approved as a supplementary learning resource.

This learning resource is for use with the following module:

- | | |
|----------|------------------------|
| Level II | Guitar and String Bass |
|----------|------------------------|

*Learning System I with Video Supplement for
Beginning Handbell Directors and Ringers*

*Learning Packages for Handbells, Volume 2
(Intermediate Level)*

Fisher, James L. Sellersville, Pennsylvania:
Schulmerich Carillons, Inc., 1987, 1984.

These learning resources are for use with the
following modules:

- Level I *Learning System I* – Handbells
(Introductory)
- Level II *Learning System I* – Handbells
(Intermediate)
- Level III *Learning Packages Volume 2* –
Handbells (Advanced)

A Music Reading Program for Ukulele

Shields, J. Marvin. Waterloo, Ontario: Waterloo
Music Company Ltd., 1982.

- Student's Book
- Teacher's Manual

These learning resources are for use with the
following modules:

- Level I Ukulele (Introductory)
- Level II Ukulele (Intermediate)

Practical Theory

Feldstein, Sandy. Sherman Oaks, California:
Alfred Publishing Co. Inc., 1982 (print), 1984
(diskettes).

Student Textbook/Workbooks:

- Volume 1*
- Volume 2*
- Volume 3*
- Complete* (Teacher's Edition; also contains
Volumes 1, 2 and 3)

Software:

- Volume 1 and 2 Diskettes*
- Volume 2 and 2 Diskettes*
- Volume 3 and 2 Diskettes*
- Complete* (Teacher's Edition; contains
Volumes 1, 2 and 3 and 6 Diskettes)

Note: Also for Choral and Instrumental Music
Programs.

These learning resources are for use with the
following modules:

- Level I *Volume 1*
Elements of Music (Introductory)
- Level II *Volume 2*
Elements of Music (Intermediate),
Musical Notation (Introductory)
- Level III *Volume 3*
Elements of Music (Advanced),
Musical Notation (Intermediate)

Theory for Beginners

Wharram, Barbara. Oakville, Ontario: The
Frederick Harris Music Company, 1974.

Note: Also for Choral Music Program.

This learning resource is for use with the
following modules:

- Level I Elements of Music (Introductory)
- Level II Elements of Music (Intermediate),
Musical Notation (Introductory)
- Level III Elements of Music (Advanced),
Musical Notation (Intermediate)

Windsongs, Book 5 and Book 6

Kulich, Birthe, and Joe Berarducci. Vancouver,
B.C.: Empire Music Company Ltd., 1985.

This learning resource is for use with the
following module:

- Level II Recorder (Intermediate)

INSTRUMENTAL MUSIC

• Wind-Percussion

Best in Class Series:

Pearson, Bruce. San Diego, California: Kjos
West, 1982, 1983 and 1985.

Best in Class, Comprehensive Band Method:

Best in Class Book 1

Note: Student books published for:
Flute, Oboe, Bassoon, Clarinet, Bass
Clarinet, Alto Clarinet, Alto Saxophone,
Tenor Saxophone, Baritone Saxophone,
Cornet/Trumpet, French Horn, Alto
Horn, Baritone T.C., Baritone B.C.,
Tuba, Trombone, Percussion (Drums and
Mallets), Piano Accompaniment.

Best in Class Book 1 – Score and Manual

Best in Class Book 2

Note: Student books published for:
Flute, Oboe, Bassoon, Clarinet, Bass
Clarinet, Alto Clarinet, Alto Saxophone,
Tenor Saxophone, Baritone Saxophone,
Cornet/Trumpet, French Horn, Alto
Horn, Baritone T.C., Baritone B.C.,
Tuba, Trombone, Percussion (Drums and
Mallets), Piano Accompaniment.

Best in Class Book 2 – Score and Manual

Encore! Comprehensive Band Method:

Encore! Book 1

Note: Student books published for: Flute, Oboe, Bassoon, Bb Clarinet, Bb Bass Clarinet, Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Cornet/Trumpet, French Horn, Eb Alto Horn, Trombone, Baritone T.C., Baritone B.C., Tuba, Percussion.

Encore! Book 1 – Score and Manual

Contemporary Band Course Series:

Ployhar, James D. Melville, New York: Belwin-Mills Publishing Corp., 1977, 1978 and 1979.

Band Today, A Band Method for Full Band Classes, Like-Instrument Classes or Individual Instruction:

Band Today Part One – Elementary

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Band Today Part One – Conductor's Score

Band Today Part Two – Intermediate

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Band Today Part Two – Conductor's Score

Band Today Part Three – Advanced/Intermediate

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Band Today Part Three – Conductor's Score

Technic Today, A Supplementary Technic Book:

Technic Today Part One

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Technic Today Part One – Conductor's Score

Technic Today Part Two

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Technic Today Part Two – Conductor's Score

Technic Today Part Three

Note: Student books published for: Flute, Bb Clarinet, Eb Alto Clarinet, Bb Bass Clarinet, Oboe, Bassoon, Eb Alto Saxophone, Bb Tenor Saxophone, Eb Baritone Saxophone, Bb Trumpet/Cornet, Horn in F, Eb Mellophone, Trombone, Baritone (Bass Clef), Baritone (Treble Clef), Bass (Tuba), Drums, Auxiliary Percussion, Bells.

Technic Today Part Three – Conductor's Score

Music Theory Volume 1

St. Paul, Minnesota: MECC (Minnesota Educational Computing Consortium), 1980.

- Diskette
- Print Manual

Practical Theory

Feldstein, Sandy. Sherman Oaks, California:
Alfred Publishing Co. Inc., 1982.

Student Textbook/Workbooks:

Volume 1

Volume 2

Volume 3

Complete (Teacher's Edition; also contains
Volumes 1, 2 and 3)

Software:

Volume 1 and 2 Diskettes

Volume 2 and 2 Diskettes

Volume 3 and 2 Diskettes

Complete (Teacher's Edition; contains
Volumes 1, 2 and 3 and 6 Diskettes)

Note: Also for Choral and General Music
Programs.

- Strings

No learning resources have been authorized
as basic for the strings program.

RECOMMENDED AND SUPPLEMENTARY LEARNING RESOURCES

A substantial number of learning resources have
been granted recommended and supplementary
status for the three music programs. These
resources are identified in each of the curriculum
guides.

COMPUTER LITERACY

A. PROGRAM RATIONALE AND PHILOSOPHY

For thirty years there has been a steady improvement in the performance of digital electronic components and a corresponding growth in the power of computer systems. The development and widespread use of large-scale integrated circuits that can be mass produced for a few cents has made it possible to build computers and other micro-electronic systems in large numbers at low enough costs to open a mass market. The cost effectiveness of computing has increased more than a million times in the period following World War II.

During the next few years, micro-electronic intelligence is likely to be incorporated into a large number of household and industrial products. Many of these products will become linked together by a worldwide communications system into a vast network that will dominate our lives and fundamentally change the world in which we live. Humankind is witnessing the transformation of the industrial society based upon energy into the electronic society based upon information.

This transformation is creating the greatest occupational upheaval in history. Many people will emerge from this upheaval permanently unemployable. At the same time, there will be a critical shortage of advanced skills, most of them associated with microprocessors and their applications. There will be a need for the entire population to be computer literate, and **unless such literacy is imparted from early childhood, a substantial part of the population may find that they lack the basic skills needed to get along in their daily lives.**

As the specific skills, knowledge and attitudes required to be computer literate will vary with time and with the students' level of computer expertise, the definition of computer literacy should remain flexible and dynamic. The following functional definition presents the elements that form

the basis for the provincial computer literacy program:

To be computer literate one must be able to describe, demonstrate and/or discuss (critically) how computers are used; how computers do their work; how computers are programmed; how to use a computer, and how computers affect our society.

The computer literacy program is based upon the following philosophical assumptions:

- As computer literacy is an aspect of general literacy required to function in our information-based society, all students should have the opportunity to become computer literate.
- Since computers affect all subject areas, computer literacy should not be considered the specialization of one subject or group of educators. Interdisciplinary content and examples from various subject fields should be incorporated into the program.
- To become computer literate, each student must have "hands-on" computer experience.
- Computer literacy encompasses three dimensions: awareness, function, and critical understanding. These dimensions should be introduced to students in a manner appropriate to their developmental and ability levels. Although all dimensions should be addressed at each level, the elementary school unit should place a strong emphasis on an overall awareness of computers in society, including their applications in everyday life. The junior high component should foster a functional or working knowledge of computers and their capabilities for problem-solving. At the senior high level, the program should stress critical understanding of the implications and effects of the use of computers in society and how computers can directly and indirectly affect the individual.

HOME ECONOMICS

A. PROGRAM RATIONALE AND PHILOSOPHY

Home economics education helps students learn concepts and develop attitudes and skills that lead to improving the quality of their lives by focusing on the nature and challenges that individuals and families experience in daily living. They learn how to manage their lives by making choices and decisions about human relationships, material and non-material resources. Students practise a management process in a laboratory setting through the context of family studies, food studies, and clothing and textiles studies.

We are challenged by ever-increasing social and technological changes in society. Therefore, in home economics education students are not limited simply to receiving information. Instead, they are actively involved in a management process which provides them the opportunity to learn to use information in directing their daily lives. They have the opportunity to become lifelong learners who are adaptable and flexible during changing times.

B. GOALS AND OBJECTIVES

GOALS

The goals of home economics education are developed from the goals of education and the goals of schooling of Alberta Education as they relate specifically to the content and process of home economics. The student is the central focus of home economics education, and the goals of the Junior High Home Economics Program are developed to provide opportunities for students to:

1. develop critical thinking skills associated with the management process to solve problems related to human relationships, food, clothing and shelter
2. transfer critical thinking skills from the laboratory setting to daily life in order to develop competencies toward self-sufficiency in human relationships, food, clothing and shelter
3. develop self-confidence through applied learning activities

4. develop responsibility for self-directed learning and goal setting
5. recognize the uniqueness of individuals and of families in order to enhance human relationships
6. develop consumer competencies
7. develop tolerance and understanding toward others
8. develop abilities to adapt to change
9. identify the range of careers related to the discipline of home economics.

OBJECTIVES

Specific objectives are identified for each module in each specialty area in the statement of content which follows.

C. CONTENT

IMPLEMENTATION

The accomplishment of junior high home economics education goals by students is facilitated by delivering home economics education as a process focused program. Process teaching/learning emphasizes the "how" of learning rather than the content, products or projects. The "how" of learning is reinforced in home economics laboratory settings, where the environment can be controlled, by requiring students to practise the management process. Through a variety of activities from the three areas, family studies, food studies, and clothing and textiles studies, students are encouraged to think creatively, access information, apply learning and evaluate learning for future directions, to become lifelong learners.

ORGANIZATION

The Junior High Home Economics Program has been organized into twenty-seven modules divided into three different levels and three specialty areas. Five modules constitute a home economics course at any level. The five modules include three compulsory modules, one from each specialty area. These modules contain essential content that serves as a foundation for other modules in that specialty area. The remaining two modules for each level can be selected from the same level or lower levels according to student and community needs. An effective program consists of a balanced selection of modules from the specialty areas.

MANAGEMENT PROCESS ↓	Specialty Areas	Level I	Level II	Level III
	Family Studies	* Child Care I Grooming Culture and Traditions	* Child Care II Family Life and Technology Living Space II	* Challenges and Choices Personal Money Management Living Space III
	Food Studies	* Foods I Simple Snacks and Meals Enjoying Food with Others	* Foods II Canadian Heritage Cookery Fast Foods	* Foods III Making Meals Cultural Foods
	Clothing and Textiles Studies	* Sewing I Clothing I Creative Textiles	* Sewing II Clothing II Sports Gear	* Sewing III Clothing III Special Purpose Sewing

*Compulsory Modules

REQUIRED/ELECTIVE COMPONENTS

Each module represents 15 hours of student activity and contains a required component and an elective component. The **required** component contains the knowledge, skills and attitudes that all students should be expected to acquire. A minimum of **70%** of the time spent on each module must address this required component. The Junior High Home Economics Program designates the student objectives as the "required" content. These objectives are met by addressing the content and process questions. The **elective** component, consistent with the content and objectives of the required component, provides opportunities to adapt or enhance instruction to meet the diverse needs and abilities of students. A maximum of **30%** of time spent on each module should address the "elective" component and provide opportunities for enrichment and remediation.

Implementation of the "required" and "elective" components, as applied to the Junior High Home Economics Program would vary with each module, taking student needs and interests as well as local community needs into consideration. Based on the above, the "elective" component (maximum time allotment of 30% or four and one-half hours in any one module) may be used to provide ongoing remedial and/or enrichment activities for a student or a group of students through the module, or to provide opportunity for differentiated projects after the initial ten and one-half hours (or more) of learning activities, to reinforce and/or enrich the student learning objectives.

Implementation of the elective component in the classroom is further described in a chart in Chapter two (Program Organization) of the *Junior High Home Economics Teacher Resource Manual*, 1987.

COURSE OUTLINE

The concepts that students learn and the attitudes and skills that they develop in the Junior High Home Economics Program are outlined for each module in the objectives section of the curriculum guide. Module titles and the objectives for each of the Levels I, II and III are as follows. (Note: the symbol ■ indicates compulsory modules.)

LEVEL I

FAMILY STUDIES

■ Child Care I

The student will be able to:

1. demonstrate an understanding of quality child care by studying a variety of care-giving skills
2. list the rights and responsibilities of a care-giver
3. demonstrate appropriate skills in caring for children
 - describe procedures for accident prevention and handling emergencies
 - select and prepare nutritious food for young children
 - describe behaviour and needs of young children
 - guide children in play activities
 - assist children in clothing choice and changes
4. integrate knowledge and skills along with decision-making, problem-solving and evaluating processes through "child care related" projects.

Grooming

The student will be able to:

1. list/describe and demonstrate grooming practices that contribute to healthfulness and a sense of well-being
2. develop criteria for the selection of grooming products and appliances, and make consumer selections
3. recognize that appearance and, thus, grooming may have an influence on self-confidence and interpersonal relationships
4. apply knowledge of grooming in order to make effective decisions, solve problems and evaluate practices associated with grooming

Culture and Traditions

The student will be able to:

1. define "tolerance and understanding" as understood in the family and the community
2. examine similarities and differences in families from generation to generation and from culture to culture, and develop respect for other lifestyle patterns
3. accept that each person is responsible for his or her own actions and demonstrates appropriate behaviour in specific situations as an expression of respect and consideration for others
4. make decisions, solve problems, and analyze behaviour, to increase tolerance and understanding of others, and respond socially in appropriate, considerate ways.

FOOD STUDIES

■ Foods I

The student will be able to:

1. demonstrate a working knowledge of a laboratory facility
2. provide a rationale for safe and hygienic practices in food preparation
 - use small utensils and electrical equipment safely
 - practise good hygiene in food preparation and laboratory clean-up
3. demonstrate techniques of food preparation
 - understand the language and use of a recipe
 - practise skills of measuring and mixing
 - appropriately organize time, energy, and equipment in preparation of simple foods and meals
 - demonstrate simple table setting
4. apply Canada's Food Guide to food choices
 - understand the function and importance of the leader nutrients in each of the four food groups

- know the recommended daily servings from each food group
- prepare a food from each food group
- select appropriate balance of foods in a simple meal preparation

5. evaluate decisions, problem-solving skills and products in food preparation according to stated criteria developed by students and teacher.

Simple Snacks and Meals

The student will be able to:

1. apply knowledge of Canada's Food Guide to food selection
2. describe how snacks may contribute to meeting recommended daily food intake
3. compare home produced and commercially produced snacks and meals
4. demonstrate skills in decision making, problem solving and evaluating as they apply to use of recipes and safe, efficient food preparation, with the ultimate goal being satisfying, nutritious snacks and meals.

Enjoying Food with Others

The student will be able to:

1. describe the influence of social and psychological factors on food choices
2. plan and prepare for a social occasion involving food
 - identify the factors basic to planning
 - develop and plan a consistent theme for a particular social occasion
3. evaluate the success of the plan
 - analyze whether the plan provided sufficient guidance and was realistic
 - evaluate time, energy, skill and money management
 - judge success of the social occasion - social enjoyment, quality of food presented, personal satisfaction
 - state possible revisions.

CLOTHING AND TEXTILES STUDIES

■ Sewing I

The student will be able to:

1. demonstrate safe use of small sewing and pressing equipment, and the sewing machine
2. define basic fabric, pattern, and sewing terms
3. construct a simple project
 - practise at least one related hand sewing skill
 - practise at least one related sewing machine skill
 - understand care
4. develop a general process plan or checklist to guide the choice of sewing projects. Items could include:
 - a realistic assessment of existing skills and knowledge
 - determination of other required knowledge and skills
 - fabric/pattern/use compatibility
 - evaluation of process and construction techniques, etc.
5. evaluate sewing project and process of completion by analyzing the planning and the project.

Clothing I

The student will be able to:

1. describe the function of clothing
 - recognize that clothing creates impressions and affects attitudes and feelings
 - understand the relationship between fibre, fabric and comfort in clothing
2. construct a simple project
 - practise use of simple pattern
 - practise basic hand and sewing machine skills
 - express self in creation of simple decorative feature on project

3. describe regular clothing care
 - identify daily care requirements
 - practise simple clothing repairs
4. make decisions, solve problems and develop evaluation skills, while making choices about clothing, clothing care and project selection.

Creative Textiles

The student will be able to:

1. recognize a variety of handworks using textiles or textile-related materials and practise working with selected ones
2. identify and describe the origins, history and current application of a number of textile handworks
3. use management process skills gained to choose and satisfactorily complete an appropriate project, commensurate with skill level and time available, in a textile handwork medium that broadens his or her capabilities.

LEVEL II

FAMILY STUDIES

■ Child Care II

The student will be able to:

1. describe how children grow and develop physically, mentally and socially from birth to five years
2. accept that ideas about child care differ in different historical eras and cultures
3. identify needs of young children and the resources to meet those needs
4. investigate available community child care facilities and examine the needs they address
5. apply skills and knowledge to the process of making decisions, problem solving and evaluating the care of young children.

Family Life and Technology

The student will be able to:

1. construct a working definition of technology as applied in this module, and create criteria for evaluating a family's use of technology, taking into account ethics, goals, values, attitudes, needs, wants and resources
2. list and experience examples of current technological items available in food preparation and nutrition, textiles, knitting and sewing, personal care, entertainment and communication
3. evaluate a variety of home-related products and/or equipment developed over time due to technology
4. discuss how the quality of life for individuals and families has changed over time due to the increased availability and use of technology.

Living Space II

The student will be able to:

1. differentiate between human needs and wants as related to living space
 - describe how a family's attitudes, values, budget, activities and size determine use of common and private space
 - propose alternatives to solve "shared space" problems (bedrooms, closets, lockers, etc.)
2. describe and practise basic sanitary and maintenance procedures applicable to personal space(s) (bedroom, locker, etc.) on a daily, monthly, and yearly basis
3. identify the basic elements of design and apply the elements to a content-related project
4. integrate knowledge with problem-solving, decision-making and evaluation skills to increase satisfaction with available living space.

FOOD STUDIES

■ Foods II

The student will be able to:

1. demonstrate an understanding of safety, hygiene, and management in food preparation
 - practise safe, hygienic routines when preparing food
 - identify and correctly interpret hazardous product symbols
2. plan balanced diets in a variety of given circumstances
 - list the role of nutrients
 - describe the relationship between nutrients and Canada's Food Guide
 - describe the relationship between balanced meals and Canada's Food Guide
 - differentiate nutrient needs throughout the life cycle
3. apply knowledge and management skills to life situations
 - understand that appropriate decision-making skills contribute to successful food and meal preparation, and the effective use of resources
 - understand how to secure and maintain maximum nutrition in food when buying, storing, and preparing
 - select and evaluate food forms and preparations appropriate to various life situations
 - select appropriate equipment for the food preparation task and make suitable adjustments or substitutions as necessary.

Canadian Heritage Cookery

The student will be able to:

1. discuss early Canadian lifestyles and why they revolved around food procurement and preparation
2. demonstrate an understanding of safety as applied to early Canadian cookery

3. identify developmental changes in food choices and techniques
 - compare and prepare foods of the past and present
 - prepare a simple, early Canadian meal
4. develop skills in decision making, problem solving and analyzing (as applicable to safety procedures and food preparation techniques) on equipment available
5. apply appropriate early Canadian cookery knowledge and skills to current food preparation situations.

Fast Foods

The student will be able to:

1. define "fast" and "convenience" foods
2. use labels as an information source and correctly interpret the information provided
 - understand the function of additives in prepared or convenience food
 - identify the "best before" or expiry date on various food items
 - identify correctly the hazardous product symbols
3. make decisions and evaluate food choices relating to "fast" or "convenience" foods
 - compare fast foods available in restaurants or food outlets with homemade alternatives
 - plan and evaluate meals using fast foods and/or convenience foods.

CLOTHING AND TEXTILES STUDIES

■ Sewing II

The student will be able to:

1. demonstrate safe use of sewing and pressing equipment
2. describe the properties of knitted, woven, and non-woven fabric
 - select fabrics appropriate to specific uses
 - prepare fabric for sewing

3. construct a project using a simple commercial pattern
 - develop and follow a management plan in construction of project
 - practise use of a commercial pattern
 - practise simple sewing techniques
 - evaluate quality of completed project.

Clothing II

The student will be able to:

1. describe the relationship between clothing and self-concept
 - analyze the images created by clothing
2. analyze the effect of various elements of design on one's appearance
 - utilize elements of design in choosing a pattern and fabric
3. manage construction of a project
 - plan according to skills, available time and money
 - practise basic sewing techniques and the use of a simple commercial pattern
 - make appropriate decisions and solve problems
 - evaluate project, management plan, and satisfaction.

Sports Gear

The student will be able to:

1. assess sports gear according to quality of construction, fibre content, fabric finish, durability, comfort, functionality and care required
 - understand the contribution of these characteristics to performance of and satisfaction with sports gear
2. identify functional textiles and clothing for particular sporting and recreational activities

3. manage construction of a sports gear item(s)
 - plan (make decisions, solve problems, analyze) according to skills, available time and money, and needs
 - practise appropriate sewing techniques and use of simple pattern or kit
 - evaluate project and management plan.

LEVEL III

FAMILY STUDIES

■ Challenges and Choices

The student will be able to:

1. define the stages of individual and family life cycles and examine physical, emotional, and social changes that may occur
2. identify and practise skills and criteria associated with responsible decision making, problem solving and evaluating as they relate to life's changes
3. plan and select appropriate alternatives of action in response to real and/or hypothetical life situations
4. evaluate selected course of action according to student/teacher developed criteria which could include effective use of available resources, satisfactory outcome, and list of possible changes in approach to a subsequent situation.

Personal Money Management

The student will be able to:

1. identify alternative resources for meeting goals
 - differentiate between human and non-human resources
 - consider the interchangeability of resources in making decisions
2. demonstrate consumer skills
 - compare consumer information sources
 - understand consumer rights and responsibilities in the marketplace
 - evaluate various forms of money for personal use

3. demonstrate money management practices consistent with individual goals and values
 - prepare a budget or money management plan
 - demonstrate the use of a budget in reaching a consumer goal
 - evaluate decisions related to the budget plan

4. demonstrate money management skills through the process of making decisions, solving problems and analyzing.

Living Space III

The student will be able to:

1. examine available choices of living space
 - differentiate between needs and wants
 - list restrictions associated with any given choice of living space
2. describe procedures or practices that contribute to a well managed home, including sanitation, basic maintenance, safety, and daily energy conservation
3. demonstrate decision making, problem solving and analyzing by interpreting the basic elements and principles of design as they apply to aesthetics in the home, and complete a related project.

FOOD STUDIES

■ Foods III

The student will be able to:

1. demonstrate an understanding of safety, hygiene and management in food preparation
2. describe how social and psychological factors influence food choices
3. list the sources and functions of food nutrients
 - review Canada's Food Guide
 - prepare a variety of food products in a manner best suited to preserving nutrients

4. describe the balance required between food intake and energy expenditure
 - analyze personal eating habits
 - prepare food/meals related to weight control
5. make decisions, solve problems, and evaluate food choices and preparation alternatives most effective in a given situation.

Making Meals

The student will be able to:

1. list various factors contributing to successful meal planning
2. appreciate the importance of consumer skills in economic meal planning
3. demonstrate ability to prepare different types of meals considering different life situations and available resources
 - analyze the appropriate components of successful meal planning
 - make appropriate decisions and solve problems
 - evaluate the satisfaction of the meal plan and the quality of the meal.

Cultural Foods

The student will be able to:

1. understand the various influences on meal patterns across Canada and in other countries and cultures
2. prepare and evaluate ethnic/religious foods and simple meals
 - compare similarities and differences in ethnic/religious foods and meal patterns from various countries or areas of the world
3. integrate knowledge, attitudes, and skills associated with food preparation in this module with decision-making, problem-solving and analyzing skills, to make more effective, satisfying and varied food choices.

CLOTHING AND TEXTILES STUDIES

■ Sewing III

The student will be able to:

1. demonstrate safe practice in use of sewing and pressing equipment
2. describe textile and garment labelling
 - apply this understanding to demonstrate appropriate care of clothing
 - examine cleaning, pressing, and maintenance procedures for various fabrics
3. construct a project using a commercial pattern
 - demonstrate ability in basic construction techniques and use of pattern
 - practise advanced construction techniques
 - develop and follow a management plan in construction of project
 - evaluate quality of completed project
4. apply decision-making, problem-solving and analyzing skills during the construction of a sewing project.

Clothing III

The student will be able to:

1. analyze present wardrobe
 - distinguish between needs and wants
 - apply knowledge of elements of design to wardrobe planning
 - establish short- and long-term plans
 - redesign or recycle clothes
2. demonstrate skills in purchasing clothes
 - identify quality features in fit, construction, and fabric
 - understand information provided on labels and hang tags
 - analyze advantages and disadvantages of available competitive clothing outlets
 - understand consumer rights and responsibilities

3. construct a garment using a commercial pattern
 - demonstrate ability in basic construction techniques and use of pattern
 - practise advanced construction techniques
 - develop and follow a management plan in construction of garment
 - compare quality, cost, and satisfaction of constructed garment with ready-made garment.
2. manage construction of a project using household textiles
 - plan according to skills, available time, and money
 - choose textiles appropriate to household need
 - practise appropriate sewing techniques and use of pattern
 - compare quality, cost, and satisfaction of home-constructed product with ready-made product.

Special Purpose Sewing

The student will be able to:

1. describe the qualities and characteristics of various household textiles
 - determine appropriateness of textiles for specific household needs

D. LEARNING RESOURCES

BASIC LEARNING RESOURCES

Basic learning resources are available from the Learning Resources Distributing Centre. The following resource has received basic status for the Junior High Home Economics Program:

- Foster, J.A., et. al. *Creative Living*. Canadian ed. (Student ed.) Don Mills, Ontario: Collier Macmillan Canada, Inc., 1985.

The content covers Family Studies, Food Studies, Clothing and Textiles Studies areas of junior high home economics. Canadian content is stressed throughout and the resource is fully SI metric. It is suitable for Levels I, II, III (Grades 7, 8, 9).

The following French language resources have received basic status for the Junior High Home Economics Program:

- *C'est la Vie!* Initiation a l'economie familiale, 2ieme edition, Manuel de l'elve. Montreal: Les Editions HRW Ltee, 1985.
- *C'est la Vie!* Initiation a l'economie familiale, 2ieme edition, Cahier d'activites de l'elve. Montreal: Les Editions HRW Ltee, 1985.
- Claire Gagne-Plante, *Economie Familiale - Pour une meilleure gestion de mes ressources*. Manuel de l'elve. Montreal: Editions du Renouveau Pedagogiques Inc., 1985.
- Claire Gagne-Plante, *Economie Familiale - Pour une meilleure gestion de mes ressources*. Cahier d'activites de l'elve. Montreal: Editions du Renouveau Pedagogiques Inc., 1985.

INDUSTRIAL EDUCATION

A. PROGRAM RATIONALE AND PHILOSOPHY

Industrial education has in the past decade added a new dimension to the program for educating young people at the secondary school level. For many students it has opened new options to help prepare them for the life ahead while enjoying their studies now. The authors of the industrial education curriculum recognize that the needs of society have changed and with them the approach to knowledge acquirement. Students today must be helped to learn how to learn, to conduct inquiry, to study independently, to make choices and decisions, to use technology, and to live with change.

The industrial education program is concerned with career development. Because careers today do not develop along predictable lines our education program must provide considerable flexibility so that students have an option of several career choices. This is made possible for several reasons. A person who has been broadly educated is able to learn what he needs to know, within limitations, about a new job. With the general education level of society rising, the future worker needs a broad as well as an experience based education. Such an education offers students subsequent chances for rapid and successful specialization. With this in mind the learning experiences should be such that they become the basis upon which specialization can be built.

Our task in the secondary school then, is to provide students not only with entry skills for several careers but to orient the program to meet social and cultural goals. This means that the various courses of disciplines must be interrelated. Industrial education provides a unique opportunity for the teacher to demonstrate these

relationships and further the goals of industrial education by means of the motivation created through practical applications. Thus the experiences students are exposed to should provide them with realistic criteria for career guidance.

Industrial education is a program consisting of courses which provide a continuum of experiences, starting with exploratory activities in the junior high school and expanding in the high school to the development of skills related to career fields. This development of the student's skills is planned for through courses in industrial and vocational education culminating in on-the-job work experience, or entry into a job or post-high school institution for further education.

The program consists of courses ranging from those designed for an exploration of the technologies and trade areas to units of practical preparation for a career. In the process the courses develop the student's knowledge of himself, his talents and his skills.

Industrial education at the junior high school, the exploratory phase of the continuum, provides the opportunity for the students to explore, reason, experiment and discover the reality of the technological society in which they live. The content of the program deals with industry, its organization, materials, processes, products, occupations, and the problems resulting from the impact of technology on society.

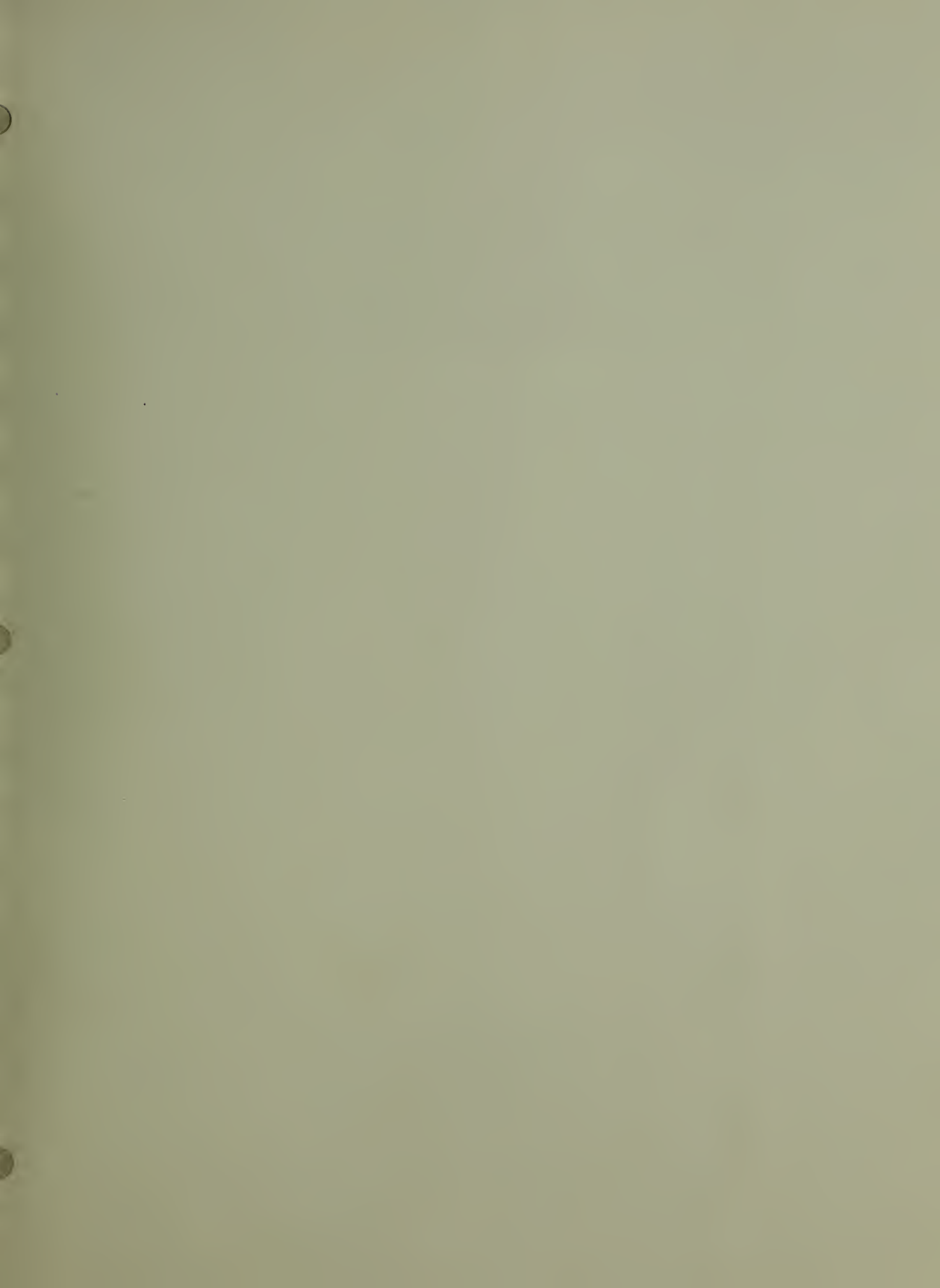
Industrial education is a subject area, the scope of which introduces students, both boys and girls, to most aspects of productive society.



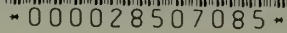
TYPEWRITING

A. PROGRAM RATIONALE AND PHILOSOPHY

An approved statement of philosophy is not available at this time.



JUN 13 1989

[illegible]

